

# SAFETY DATA SHEET



Avida Duo DNA and Methyl Reagent Kit with 1-192 Index Primer Pairs for ILM, 96 Reactions, Part Number G9440A

## Section 1. Identification

### 1.1 Product identifier

<b>Product name</b>	: Avida Duo DNA and Methyl Reagent Kit with 1-192 Index Primer Pairs for ILM, 96 Reactions, Part Number G9440A	
<b>Part no. (chemical kit)</b>	: G9440A	
<b>Part no.</b>	: <u>Avida DNA and Duo Reagent Box 2, 96 Reactions/Avida Methyl and Duo Reagent Box 3, 96 Reactions</u>	<u>5282-0142/5282-0150</u>
	Nuclease-Free Water	5271-0134
	<u>Avida Duo Methyl Reagent Box 1, 96 Reactions</u>	<u>5282-0152</u>
	End Prep Buffer	5271-0121
	End Prep Enzyme	5271-0122
	Ligation Buffer	5271-0123
	Ligation Enzyme	5271-0124
	Adapter for ILM	5271-0139
	Hyb Blocker	5271-0126
	Hyb Buffer	5271-0127
	Hyb Enhancer	5271-0128
	Soft Conversion Reagent A	5271-0137
	2X Amplification Mastermix	5271-0129
	2X Methyl Amplification Mastermix	5271-0138
	<u>Avida DNA and Duo Reagent Box 2, 96 Reactions</u>	<u>5282-0142</u>
	Library Wash Buffer	5271-0130
	Hyb Wash Buffer 1	5271-0131
	Hyb Wash Buffer 2	5271-0132
	Resuspension Buffer	5271-0133
	<u>Avida Methyl and Duo Reagent Box 3, 96 Reactions</u>	<u>5282-0150</u>
	Soft Conversion Reagent B	5271-0113
	Soft Conversion Binding Beads	5271-0141
	5X Soft Conversion Wash Buffer	5271-0142
	Soft Conversion Elution Buffer	5271-0143
	Soft Conversion Repair Solution	5271-0144
	<u>Avida Duo Beads Box, 96 Reactions</u>	<u>5282-0154</u>
	Library Binding Beads	5271-0135
	Capture Beads	5271-0136
	<u>Avida Index Primer Pairs 1-192 for ILM</u>	<u>5280-0057</u>
	Avida Index Primer Pairs 1-96 for ILM	5274-0079
	Avida Index Primer Pairs 97-192 for ILM	5274-0080

**Validation date** : 4/8/2024

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

<b>Identified uses</b>	: Analytical reagent. For research use only.	
	Nuclease-Free Water	5.76 ml (96 reactions)
	End Prep Buffer	0.877 ml (96 reactions)
	End Prep Enzyme	0.351 ml (96 reactions)
	Ligation Buffer	2.953 ml (96 reactions)
	Ligation Enzyme	0.695 ml (96 reactions)
	Adapter for ILM	0.588 ml (96 reactions)
	Hyb Blocker	0.349 ml (96 reactions)
	Hyb Buffer	5.524 ml (96 reactions)

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Hyb Enhancer	0.988 ml (96 reactions)
Soft Conversion Reagent A	0.387 ml (96 reactions)
2X Amplification Mastermix	2.940 ml (96 reactions)
2X Methyl Amplification Mastermix	2.940 ml (96 reactions)
Library Wash Buffer	2 x 21.12 ml (96 reactions)
Hyb Wash Buffer 1	2 x 31.680 ml (96 reactions)
Hyb Wash Buffer 2	2 x 18.24 ml (96 reactions)
Resuspension Buffer	2.364 ml (96 reactions)
Soft Conversion Reagent B	6 x 0.750 ml
Soft Conversion Binding Beads	17.280 ml (96 reactions)
5X Soft Conversion Wash Buffer	8 ml (96 reactions)
Soft Conversion Elution Buffer	1.728 ml (96 reactions)
Soft Conversion Repair Solution	0.588 ml (96 reactions)
Library Binding Beads	10.083 ml (96 reactions)
Capture Beads	2 x 0.944 ml (96 reactions)
Avida Index Primer Pairs 1-96 for ILM	96 x 0.005 ml
Avida Index Primer Pairs 97-192 for ILM	96 x 0.005 ml

**Uses advised against** : Not for use in diagnostic procedures.

### 1.3 Details of the supplier of the safety data sheet

**Supplier/Manufacturer** : Agilent Technologies, Inc.  
5301 Stevens Creek Blvd  
Santa Clara, CA 95051, USA  
800-227-9770

### 1.4 Emergency telephone number

**In case of emergency** : CHEMTREC®: 1-800-424-9300

## Section 2. Hazards identification

### 2.1 Classification of the substance or mixture

<b>OSHA/HCS status</b>	: Nuclease-Free Water	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
	End Prep Buffer	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
	End Prep Enzyme	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
	Ligation Buffer	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
	Ligation Enzyme	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
	Adapter for ILM	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
	Hyb Blocker	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR

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	1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Hyb Buffer	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Hyb Enhancer	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Soft Conversion Reagent A	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
2X Amplification Mastermix	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
2X Methyl Amplification Mastermix	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Library Wash Buffer	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Hyb Wash Buffer 1	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Hyb Wash Buffer 2	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Resuspension Buffer	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Soft Conversion Reagent B	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Soft Conversion Binding Beads	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
5X Soft Conversion Wash Buffer	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Soft Conversion Elution Buffer	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Soft Conversion Repair Solution	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR

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	1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Library Binding Beads	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Capture Beads	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Avida Index Primer Pairs 1-96 for ILM	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Avida Index Primer Pairs 97-192 for ILM	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

### Classification of the substance or mixture

#### End Prep Buffer

H412 AQUATIC HAZARD (LONG-TERM) - Category 3

#### End Prep Enzyme

H320 EYE IRRITATION - Category 2B

#### Ligation Enzyme

H320 EYE IRRITATION - Category 2B

#### Hyb Buffer

H302 ACUTE TOXICITY (oral) - Category 4  
H315 SKIN IRRITATION - Category 2  
H370 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1  
H412 AQUATIC HAZARD (LONG-TERM) - Category 3

#### Hyb Enhancer

H351 CARCINOGENICITY - Category 2  
H360 TOXIC TO REPRODUCTION - Category 1B  
H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

#### Soft Conversion Reagent A

H227 FLAMMABLE LIQUIDS - Category 4  
H319 EYE IRRITATION - Category 2A  
H360 TOXIC TO REPRODUCTION - Category 1B

#### Soft Conversion Reagent B

H319 EYE IRRITATION - Category 2A

#### Soft Conversion Binding Beads

H226 FLAMMABLE LIQUIDS - Category 3

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H314	SKIN CORROSION - Category 1C
H318	SERIOUS EYE DAMAGE - Category 1
H400	AQUATIC HAZARD (ACUTE) - Category 1
H411	AQUATIC HAZARD (LONG-TERM) - Category 2







### Soft Conversion Elution Buffer

H314	SKIN CORROSION - Category 1
H318	SERIOUS EYE DAMAGE - Category 1

<b>Ingredients of unknown toxicity</b>	Hyb Buffer	Percentage of the mixture consisting of ingredient (s) of unknown acute oral toxicity: 1 - 10%
	Hyb Buffer	Percentage of the mixture consisting of ingredient (s) of unknown hazards to the aquatic environment: 3.4%
	2X Methyl Amplification Mastermix	Percentage of the mixture consisting of ingredient (s) of unknown hazards to the aquatic environment: 10%
	Soft Conversion Reagent B	Percentage of the mixture consisting of ingredient (s) of unknown hazards to the aquatic environment: 70%

### 2.2 GHS label elements

#### Hazard pictograms

Hyb Buffer	
Hyb Enhancer	
Soft Conversion Reagent A	
Soft Conversion Reagent B	
Soft Conversion Binding Beads	
Soft Conversion Elution Buffer	

#### Signal word

Nuclease-Free Water	No signal word.
End Prep Buffer	No signal word.
End Prep Enzyme	Warning
Ligation Buffer	No signal word.
Ligation Enzyme	Warning
Adapter for ILM	No signal word.
Hyb Blocker	No signal word.

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	Hyb Buffer	Danger
	Hyb Enhancer	Danger
	Soft Conversion Reagent A	Danger
	2X Amplification Mastermix	No signal word.
	2X Methyl Amplification Mastermix	No signal word.
	Library Wash Buffer	No signal word.
	Hyb Wash Buffer 1	No signal word.
	Hyb Wash Buffer 2	No signal word.
	Resuspension Buffer	No signal word.
	Soft Conversion Reagent B	Warning
	Soft Conversion Binding Beads	Danger
	5X Soft Conversion Wash Buffer	No signal word.
	Soft Conversion Elution Buffer	Danger
	Soft Conversion Repair Solution	No signal word.
	Library Binding Beads	No signal word.
	Capture Beads	No signal word.
	Avida Index Primer Pairs 1-96 for ILM	No signal word.
	Avida Index Primer Pairs 97-192 for ILM	No signal word.
<b>Hazard statements</b>	: Nuclease-Free Water	No known significant effects or critical hazards.
	End Prep Buffer	H412 - Harmful to aquatic life with long lasting effects.
	End Prep Enzyme	H320 - Causes eye irritation.
	Ligation Buffer	No known significant effects or critical hazards.
	Ligation Enzyme	H320 - Causes eye irritation.
	Adapter for ILM	No known significant effects or critical hazards.
	Hyb Blocker	No known significant effects or critical hazards.
	Hyb Buffer	H302 - Harmful if swallowed. H315 - Causes skin irritation. H370 - Causes damage to organs. (central nervous system (CNS)) H412 - Harmful to aquatic life with long lasting effects.
	Hyb Enhancer	H351 - Suspected of causing cancer. H360 - May damage fertility or the unborn child. H373 - May cause damage to organs through prolonged or repeated exposure. (blood)
	Soft Conversion Reagent A	H227 - Combustible liquid. H319 - Causes serious eye irritation. H360 - May damage fertility or the unborn child.
	2X Amplification Mastermix	No known significant effects or critical hazards.
	2X Methyl Amplification Mastermix	No known significant effects or critical hazards.
	Library Wash Buffer	No known significant effects or critical hazards.
	Hyb Wash Buffer 1	No known significant effects or critical hazards.
	Hyb Wash Buffer 2	No known significant effects or critical hazards.
	Resuspension Buffer	No known significant effects or critical hazards.
	Soft Conversion Reagent B	H319 - Causes serious eye irritation.
	Soft Conversion Binding Beads	H226 - Flammable liquid and vapor. H314 - Causes severe skin burns and eye damage. H400 - Very toxic to aquatic life. H411 - Toxic to aquatic life with long lasting effects.
	5X Soft Conversion Wash Buffer	No known significant effects or critical hazards.
	Soft Conversion Elution Buffer	H314 - Causes severe skin burns and eye damage.
	Soft Conversion Repair Solution	No known significant effects or critical hazards.
	Library Binding Beads	No known significant effects or critical hazards.
	Capture Beads	No known significant effects or critical hazards.
	Avida Index Primer Pairs 1-96 for ILM	No known significant effects or critical hazards.
	Avida Index Primer Pairs 97-192	No known significant effects or critical hazards.



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Ligation Enzyme	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
Adapter for ILM	Not applicable.
Hyb Blocker	Not applicable.
Hyb Buffer	P308 + P311 - IF exposed: Call a POISON CENTER or doctor. P362 + P364 - Take off contaminated clothing and wash it before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water.
Hyb Enhancer	P308 + P313 - IF exposed or concerned: Get medical advice or attention.
Soft Conversion Reagent A	P308 + P313 - IF exposed or concerned: Get medical advice or attention. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
2X Amplification Mastermix	Not applicable.
2X Methyl Amplification Mastermix	Not applicable.
Library Wash Buffer	Not applicable.
Hyb Wash Buffer 1	Not applicable.
Hyb Wash Buffer 2	Not applicable.
Resuspension Buffer	Not applicable.
Soft Conversion Reagent B	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
Soft Conversion Binding Beads	P391 - Collect spillage. P304 + P310 - IF INHALED: Immediately call a POISON CENTER or doctor. P301 + P310, P330, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. P363 - Wash contaminated clothing before reuse. P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
5X Soft Conversion Wash Buffer	Not applicable.
Soft Conversion Elution Buffer	P304 + P310 - IF INHALED: Immediately call a POISON CENTER or doctor. P301 + P310, P330, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.



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Rinse skin with water. Immediately call a POISON CENTER or doctor.

P363 - Wash contaminated clothing before reuse.  
P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

	Soft Conversion Repair Solution	Not applicable.
	Library Binding Beads	Not applicable.
	Capture Beads	Not applicable.
	Avida Index Primer Pairs 1-96 for ILM	Not applicable.
	Avida Index Primer Pairs 97-192 for ILM	Not applicable.
<b>Storage</b>	: Nuclease-Free Water	Not applicable.
	End Prep Buffer	Not applicable.
	End Prep Enzyme	Not applicable.
	Ligation Buffer	Not applicable.
	Ligation Enzyme	Not applicable.
	Adapter for ILM	Not applicable.
	Hyb Blocker	Not applicable.
	Hyb Buffer	Not applicable.
	Hyb Enhancer	Not applicable.
	Soft Conversion Reagent A	P403 + P235 - Store in a well-ventilated place. Keep cool.
	2X Amplification Mastermix	Not applicable.
	2X Methyl Amplification Mastermix	Not applicable.
	Library Wash Buffer	Not applicable.
	Hyb Wash Buffer 1	Not applicable.
	Hyb Wash Buffer 2	Not applicable.
	Resuspension Buffer	Not applicable.
	Soft Conversion Reagent B	Not applicable.
	Soft Conversion Binding Beads	P403 + P235 - Store in a well-ventilated place. Keep cool.
	5X Soft Conversion Wash Buffer	Not applicable.
	Soft Conversion Elution Buffer	Not applicable.
	Soft Conversion Repair Solution	Not applicable.
	Library Binding Beads	Not applicable.
	Capture Beads	Not applicable.
	Avida Index Primer Pairs 1-96 for ILM	Not applicable.
	Avida Index Primer Pairs 97-192 for ILM	Not applicable.
<b>Disposal</b>	: Nuclease-Free Water	Not applicable.
	End Prep Buffer	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	End Prep Enzyme	Not applicable.
	Ligation Buffer	Not applicable.
	Ligation Enzyme	Not applicable.
	Adapter for ILM	Not applicable.
	Hyb Blocker	Not applicable.
	Hyb Buffer	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	Hyb Enhancer	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	Soft Conversion Reagent A	P501 - Dispose of contents and container in

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		accordance with all local, regional, national and international regulations.
	2X Amplification Mastermix	Not applicable.
	2X Methyl Amplification Mastermix	Not applicable.
	Library Wash Buffer	Not applicable.
	Hyb Wash Buffer 1	Not applicable.
	Hyb Wash Buffer 2	Not applicable.
	Resuspension Buffer	Not applicable.
	Soft Conversion Reagent B	Not applicable.
	Soft Conversion Binding Beads	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	5X Soft Conversion Wash Buffer	Not applicable.
	Soft Conversion Elution Buffer	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	Soft Conversion Repair Solution	Not applicable.
	Library Binding Beads	Not applicable.
	Capture Beads	Not applicable.
	Avida Index Primer Pairs 1-96 for ILM	Not applicable.
	Avida Index Primer Pairs 97-192 for ILM	Not applicable.
<b>Supplemental label elements</b>	: Nuclease-Free Water	None known.
	End Prep Buffer	None known.
	End Prep Enzyme	None known.
	Ligation Buffer	None known.
	Ligation Enzyme	None known.
	Adapter for ILM	None known.
	Hyb Blocker	None known.
	Hyb Buffer	None known.
	Hyb Enhancer	None known.
	Soft Conversion Reagent A	None known.
	2X Amplification Mastermix	None known.
	2X Methyl Amplification Mastermix	None known.
	Library Wash Buffer	None known.
	Hyb Wash Buffer 1	None known.
	Hyb Wash Buffer 2	None known.
	Resuspension Buffer	None known.
	Soft Conversion Reagent B	None known.
	Soft Conversion Binding Beads	Keep container tightly closed. Do not breathe vapor or spray. Do not taste or swallow. Use only with adequate ventilation. Wash thoroughly after handling.
	5X Soft Conversion Wash Buffer	None known.
	Soft Conversion Elution Buffer	None known.
Soft Conversion Repair Solution	None known.	
Library Binding Beads	None known.	
Capture Beads	None known.	
Avida Index Primer Pairs 1-96 for ILM	None known.	
Avida Index Primer Pairs 97-192 for ILM	None known.	

### 2.3 Other hazards

## Section 2. Hazards identification

<b>Hazards not otherwise classified</b>	:	Nuclease-Free Water	None known.
		End Prep Buffer	None known.
		End Prep Enzyme	None known.
		Ligation Buffer	None known.
		Ligation Enzyme	None known.
		Adapter for ILM	None known.
		Hyb Blocker	None known.
		Hyb Buffer	None known.
		Hyb Enhancer	None known.
		Soft Conversion Reagent A	None known.
		2X Amplification Mastermix	None known.
		2X Methyl Amplification Mastermix	None known.
		Library Wash Buffer	None known.
		Hyb Wash Buffer 1	None known.
		Hyb Wash Buffer 2	None known.
		Resuspension Buffer	None known.
		Soft Conversion Reagent B	None known.
		Soft Conversion Binding Beads	Causes respiratory tract burns. Causes digestive tract burns.
		5X Soft Conversion Wash Buffer	None known.
		Soft Conversion Elution Buffer	None known.
		Soft Conversion Repair Solution	None known.
		Library Binding Beads	None known.
		Capture Beads	None known.
	Avida Index Primer Pairs 1-96 for ILM	None known.	
	Avida Index Primer Pairs 97-192 for ILM	None known.	

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	:	Nuclease-Free Water	Substance
		End Prep Buffer	Mixture
		End Prep Enzyme	Mixture
		Ligation Buffer	Mixture
		Ligation Enzyme	Mixture
		Adapter for ILM	Mixture
		Hyb Blocker	Mixture
		Hyb Buffer	Mixture
		Hyb Enhancer	Mixture
		Soft Conversion Reagent A	Mixture
		2X Amplification Mastermix	Mixture
		2X Methyl Amplification Mastermix	Mixture
		Library Wash Buffer	Mixture
		Hyb Wash Buffer 1	Mixture
		Hyb Wash Buffer 2	Mixture
		Resuspension Buffer	Mixture
		Soft Conversion Reagent B	Mixture
		Soft Conversion Binding Beads	Mixture
		5X Soft Conversion Wash Buffer	Mixture
		Soft Conversion Elution Buffer	Mixture
		Soft Conversion Repair Solution	Mixture
		Library Binding Beads	Mixture
		Capture Beads	Mixture
	Avida Index Primer Pairs 1-96 for ILM	Mixture	
	Avida Index Primer Pairs 97-192 for ILM	Mixture	

**Section 3. Composition/information on ingredients**

<b>Ingredient name</b>	<b>%</b>	<b>CAS number</b>
<b>Nuclease-Free Water</b>		
water	100	7732-18-5
<b>End Prep Buffer</b>		
Magnesium chloride	<2.5	7786-30-3
<b>End Prep Enzyme</b>		
Glycerol	≥50 - ≤75	56-81-5
<b>Ligation Enzyme</b>		
Glycerol	≥50 - ≤75	56-81-5
<b>Hyb Buffer</b>		
tetramethylammonium chloride	≥10 - <15	75-57-0
Dextran sulfate sodium	≤3	9011-18-1
Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	<0.1	9036-19-5
<b>Hyb Enhancer</b>		
Formamide	≥90	75-12-7
<b>Soft Conversion Reagent A</b>		
tetrahydro-2-furylmethanol	≥90	97-99-4
<b>2X Amplification Mastermix</b>		
Glycerol	<10	56-81-5
<b>Hyb Wash Buffer 1</b>		
Sodium dodecyl sulphate	≤0.3	151-21-3
<b>Hyb Wash Buffer 2</b>		
Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	<0.1	9036-19-5
<b>Soft Conversion Reagent B</b>		
ammonium hydrogensulphite	≥50 - ≤75	10192-30-0

## Section 3. Composition/information on ingredients

Soft Conversion Binding Beads		
Ethanol	≥50 - ≤75	64-17-5
Guanidinium thiocyanate	≥10 - ≤21	593-84-0
Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	≤6.5	9036-19-5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### 4.1 Description of necessary first aid measures

<b>Eye contact</b>	: Nuclease-Free Water	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	End Prep Buffer	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	End Prep Enzyme	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.
	Ligation Buffer	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	Ligation Enzyme	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.
	Adapter for ILM	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	Hyb Blocker	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	Hyb Buffer	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician.
	Hyb Enhancer	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
	Soft Conversion Reagent A	Immediately flush eyes with plenty of water,

## Section 4. First aid measures

	occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
2X Amplification Mastermix	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
2X Methyl Amplification Mastermix	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Library Wash Buffer	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Hyb Wash Buffer 1	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Hyb Wash Buffer 2	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Resuspension Buffer	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Soft Conversion Reagent B	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Soft Conversion Binding Beads	Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
5X Soft Conversion Wash Buffer	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Soft Conversion Elution Buffer	Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
Soft Conversion Repair Solution	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Library Binding Beads	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Capture Beads	Immediately flush eyes with plenty of water,

## Section 4. First aid measures

occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Avida Index Primer Pairs 1-96 for ILM

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Avida Index Primer Pairs 97-192 for ILM

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

### Inhalation

: Nuclease-Free Water

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

End Prep Buffer

Remove victim to fresh air and keep at rest in a position comfortable for breathing. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

End Prep Enzyme

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Ligation Buffer

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Ligation Enzyme

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Adapter for ILM

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Hyb Blocker

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Hyb Buffer

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory

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	<p>arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.</p>
Hyb Enhancer	<p>Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.</p>
Soft Conversion Reagent A	<p>Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.</p>
2X Amplification Mastermix	<p>Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.</p>
2X Methyl Amplification Mastermix	<p>Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.</p>
Library Wash Buffer	<p>Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.</p>
Hyb Wash Buffer 1	<p>Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.</p>
Hyb Wash Buffer 2	<p>Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.</p>
Resuspension Buffer	<p>Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.</p>
Soft Conversion Reagent B	<p>Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory</p>



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	<p>arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.</p>
Soft Conversion Binding Beads	<p>Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.</p>
5X Soft Conversion Wash Buffer	<p>Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.</p>
Soft Conversion Elution Buffer	<p>Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.</p>
Soft Conversion Repair Solution	<p>Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.</p>
Library Binding Beads	<p>Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.</p>
Capture Beads	<p>Remove victim to fresh air and keep at rest in a</p>

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		position comfortable for breathing. Get medical attention if symptoms occur.
	Avida Index Primer Pairs 1-96 for ILM	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Avida Index Primer Pairs 97-192 for ILM	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
<b>Skin contact</b>	: Nuclease-Free Water	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	End Prep Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	End Prep Enzyme	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	Ligation Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Ligation Enzyme	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	Adapter for ILM	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Hyb Blocker	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Hyb Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	Hyb Enhancer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	Soft Conversion Reagent A	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	2X Amplification Mastermix	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	2X Methyl Amplification Mastermix	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Library Wash Buffer	Flush contaminated skin with plenty of water.

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Hyb Wash Buffer 1	Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Hyb Wash Buffer 2	Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Resuspension Buffer	Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Soft Conversion Reagent B	Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Soft Conversion Binding Beads	Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
5X Soft Conversion Wash Buffer	Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Soft Conversion Elution Buffer	Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Soft Conversion Repair Solution	Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Library Binding Beads	Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Capture Beads	Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Avida Index Primer Pairs 1-96 for ILM	Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Avida Index Primer Pairs 97-192 for ILM	Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
<b>Ingestion</b> : Nuclease-Free Water	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
End Prep Buffer	Wash out mouth with water. If material has been swallowed and the exposed person is conscious,

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End Prep Enzyme	<p>give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel.</p> <p>Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.</p>
Ligation Buffer	<p>Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.</p>
Ligation Enzyme	<p>Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.</p>
Adapter for ILM	<p>Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.</p>
Hyb Blocker	<p>Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.</p>
Hyb Buffer	<p>Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in</p>

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Hyb Enhancer	recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Soft Conversion Reagent A	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
2X Amplification Mastermix	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
2X Methyl Amplification Mastermix	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Library Wash Buffer	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Hyb Wash Buffer 1	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Hyb Wash Buffer 2	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Resuspension Buffer	Wash out mouth with water. If material has been

## Section 4. First aid measures

Soft Conversion Reagent B

swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.

Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Soft Conversion Binding Beads

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

5X Soft Conversion Wash Buffer

Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Soft Conversion Elution Buffer

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Soft Conversion Repair Solution

Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms

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Library Binding Beads	occur. Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Capture Beads	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Avida Index Primer Pairs 1-96 for ILM	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Avida Index Primer Pairs 97-192 for ILM	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

### 4.2 Most important symptoms/effects, acute and delayed

#### Potential acute health effects

##### Eye contact

: Nuclease-Free Water	No known significant effects or critical hazards.
End Prep Buffer	No known significant effects or critical hazards.
End Prep Enzyme	Causes eye irritation.
Ligation Buffer	No known significant effects or critical hazards.
Ligation Enzyme	Causes eye irritation.
Adapter for ILM	No known significant effects or critical hazards.
Hyb Blocker	No known significant effects or critical hazards.
Hyb Buffer	No known significant effects or critical hazards.
Hyb Enhancer	No known significant effects or critical hazards.
Soft Conversion Reagent A	Causes serious eye irritation.
2X Amplification Mastermix	No known significant effects or critical hazards.
2X Methyl Amplification Mastermix	No known significant effects or critical hazards.
Library Wash Buffer	No known significant effects or critical hazards.
Hyb Wash Buffer 1	No known significant effects or critical hazards.
Hyb Wash Buffer 2	No known significant effects or critical hazards.
Resuspension Buffer	No known significant effects or critical hazards.
Soft Conversion Reagent B	Causes serious eye irritation.
Soft Conversion Binding Beads	Causes serious eye damage.
5X Soft Conversion Wash Buffer	No known significant effects or critical hazards.
Soft Conversion Elution Buffer	Causes serious eye damage.
Soft Conversion Repair Solution	No known significant effects or critical hazards.
Library Binding Beads	No known significant effects or critical hazards.
Capture Beads	No known significant effects or critical hazards.
Avida Index Primer Pairs 1-96 for ILM	No known significant effects or critical hazards.
Avida Index Primer Pairs 97-192 for ILM	No known significant effects or critical hazards.

## Section 4. First aid measures

### Inhalation

Nuclease-Free Water	No known significant effects or critical hazards.
End Prep Buffer	No known significant effects or critical hazards.
End Prep Enzyme	No known significant effects or critical hazards.
Ligation Buffer	No known significant effects or critical hazards.
Ligation Enzyme	No known significant effects or critical hazards.
Adapter for ILM	No known significant effects or critical hazards.
Hyb Blocker	No known significant effects or critical hazards.
Hyb Buffer	Causes damage to organs following a single exposure if inhaled.
Hyb Enhancer	No known significant effects or critical hazards.
Soft Conversion Reagent A	No known significant effects or critical hazards.
2X Amplification Mastermix	No known significant effects or critical hazards.
2X Methyl Amplification Mastermix	No known significant effects or critical hazards.
Library Wash Buffer	No known significant effects or critical hazards.
Hyb Wash Buffer 1	No known significant effects or critical hazards.
Hyb Wash Buffer 2	No known significant effects or critical hazards.
Resuspension Buffer	No known significant effects or critical hazards.
Soft Conversion Reagent B	No known significant effects or critical hazards.
Soft Conversion Binding Beads	Corrosive to the respiratory system.
5X Soft Conversion Wash Buffer	No known significant effects or critical hazards.
Soft Conversion Elution Buffer	No known significant effects or critical hazards.
Soft Conversion Repair Solution	No known significant effects or critical hazards.
Library Binding Beads	No known significant effects or critical hazards.
Capture Beads	No known significant effects or critical hazards.
Avida Index Primer Pairs 1-96 for ILM	No known significant effects or critical hazards.
Avida Index Primer Pairs 97-192 for ILM	No known significant effects or critical hazards.

### Skin contact

Nuclease-Free Water	No known significant effects or critical hazards.
End Prep Buffer	No known significant effects or critical hazards.
End Prep Enzyme	No known significant effects or critical hazards.
Ligation Buffer	No known significant effects or critical hazards.
Ligation Enzyme	No known significant effects or critical hazards.
Adapter for ILM	No known significant effects or critical hazards.
Hyb Blocker	No known significant effects or critical hazards.
Hyb Buffer	Causes damage to organs following a single exposure in contact with skin. Causes skin irritation.
Hyb Enhancer	No known significant effects or critical hazards.
Soft Conversion Reagent A	No known significant effects or critical hazards.
2X Amplification Mastermix	No known significant effects or critical hazards.
2X Methyl Amplification Mastermix	No known significant effects or critical hazards.
Library Wash Buffer	No known significant effects or critical hazards.
Hyb Wash Buffer 1	No known significant effects or critical hazards.
Hyb Wash Buffer 2	No known significant effects or critical hazards.
Resuspension Buffer	No known significant effects or critical hazards.
Soft Conversion Reagent B	No known significant effects or critical hazards.
Soft Conversion Binding Beads	Causes severe burns.
5X Soft Conversion Wash Buffer	No known significant effects or critical hazards.
Soft Conversion Elution Buffer	Causes severe burns.
Soft Conversion Repair Solution	No known significant effects or critical hazards.
Library Binding Beads	No known significant effects or critical hazards.
Capture Beads	No known significant effects or critical hazards.
Avida Index Primer Pairs 1-96 for ILM	No known significant effects or critical hazards.
Avida Index Primer Pairs 97-192 for ILM	No known significant effects or critical hazards.





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		pain or irritation watering redness
	Soft Conversion Binding Beads	Adverse symptoms may include the following: pain watering redness
	5X Soft Conversion Wash Buffer	No specific data.
	Soft Conversion Elution Buffer	Adverse symptoms may include the following: pain watering redness
	Soft Conversion Repair Solution	No specific data.
	Library Binding Beads	No specific data.
	Capture Beads	No specific data.
	Avida Index Primer Pairs 1-96 for ILM	No specific data.
	Avida Index Primer Pairs 97-192 for ILM	No specific data.
<b>Inhalation</b>	: Nuclease-Free Water	No specific data.
	End Prep Buffer	No specific data.
	End Prep Enzyme	No specific data.
	Ligation Buffer	No specific data.
	Ligation Enzyme	No specific data.
	Adapter for ILM	No specific data.
	Hyb Blocker	No specific data.
	Hyb Buffer	No specific data.
	Hyb Enhancer	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
	Soft Conversion Reagent A	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
	2X Amplification Mastermix	No specific data.
	2X Methyl Amplification Mastermix	No specific data.
	Library Wash Buffer	No specific data.
	Hyb Wash Buffer 1	No specific data.
	Hyb Wash Buffer 2	No specific data.
	Resuspension Buffer	No specific data.
	Soft Conversion Reagent B	No specific data.
	Soft Conversion Binding Beads	Adverse symptoms may include the following: respiratory tract irritation coughing
	5X Soft Conversion Wash Buffer	No specific data.
	Soft Conversion Elution Buffer	No specific data.
	Soft Conversion Repair Solution	No specific data.
	Library Binding Beads	No specific data.
	Capture Beads	No specific data.
	Avida Index Primer Pairs 1-96 for ILM	No specific data.
	Avida Index Primer Pairs 97-192 for ILM	No specific data.

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### Skin contact

Nuclease-Free Water	No specific data.
End Prep Buffer	No specific data.
End Prep Enzyme	No specific data.
Ligation Buffer	No specific data.
Ligation Enzyme	No specific data.
Adapter for ILM	No specific data.
Hyb Blocker	No specific data.
Hyb Buffer	Adverse symptoms may include the following: irritation redness
Hyb Enhancer	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Soft Conversion Reagent A	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
2X Amplification Mastermix	No specific data.
2X Methyl Amplification Mastermix	No specific data.
Library Wash Buffer	No specific data.
Hyb Wash Buffer 1	No specific data.
Hyb Wash Buffer 2	No specific data.
Resuspension Buffer	No specific data.
Soft Conversion Reagent B	No specific data.
Soft Conversion Binding Beads	Adverse symptoms may include the following: pain or irritation redness blistering may occur
5X Soft Conversion Wash Buffer	No specific data.
Soft Conversion Elution Buffer	Adverse symptoms may include the following: pain or irritation redness blistering may occur
Soft Conversion Repair Solution	No specific data.
Library Binding Beads	No specific data.
Capture Beads	No specific data.
Avida Index Primer Pairs 1-96 for ILM	No specific data.
Avida Index Primer Pairs 97-192 for ILM	No specific data.

### Ingestion

Nuclease-Free Water	No specific data.
End Prep Buffer	No specific data.
End Prep Enzyme	No specific data.
Ligation Buffer	No specific data.
Ligation Enzyme	No specific data.
Adapter for ILM	No specific data.
Hyb Blocker	No specific data.
Hyb Buffer	No specific data.
Hyb Enhancer	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Soft Conversion Reagent A	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
2X Amplification Mastermix	No specific data.
2X Methyl Amplification Mastermix	No specific data.

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Library Wash Buffer	No specific data.
Hyb Wash Buffer 1	No specific data.
Hyb Wash Buffer 2	No specific data.
Resuspension Buffer	No specific data.
Soft Conversion Reagent B	No specific data.
Soft Conversion Binding Beads	Adverse symptoms may include the following: stomach pains
5X Soft Conversion Wash Buffer	No specific data.
Soft Conversion Elution Buffer	Adverse symptoms may include the following: stomach pains
Soft Conversion Repair Solution	No specific data.
Library Binding Beads	No specific data.
Capture Beads	No specific data.
Avida Index Primer Pairs 1-96 for ILM	No specific data.
Avida Index Primer Pairs 97-192 for ILM	No specific data.

### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

<b>Notes to physician</b>	:	Nuclease-Free Water	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		End Prep Buffer	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
		End Prep Enzyme	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Ligation Buffer	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
		Ligation Enzyme	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Adapter for ILM	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Hyb Blocker	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Hyb Buffer	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
		Hyb Enhancer	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
		Soft Conversion Reagent A	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		2X Amplification Mastermix	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		2X Methyl Amplification Mastermix	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

## Section 4. First aid measures

Library Wash Buffer	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Hyb Wash Buffer 1	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Hyb Wash Buffer 2	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Resuspension Buffer	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Soft Conversion Reagent B	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Soft Conversion Binding Beads	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
5X Soft Conversion Wash Buffer	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Soft Conversion Elution Buffer	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Soft Conversion Repair Solution	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Library Binding Beads	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Capture Beads	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Avida Index Primer Pairs 1-96 for ILM	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Avida Index Primer Pairs 97-192 for ILM	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

### Specific treatments

: Nuclease-Free Water	No specific treatment.
End Prep Buffer	No specific treatment.
End Prep Enzyme	No specific treatment.
Ligation Buffer	No specific treatment.
Ligation Enzyme	No specific treatment.
Adapter for ILM	No specific treatment.
Hyb Blocker	No specific treatment.
Hyb Buffer	No specific treatment.
Hyb Enhancer	No specific treatment.
Soft Conversion Reagent A	No specific treatment.
2X Amplification Mastermix	No specific treatment.
2X Methyl Amplification Mastermix	No specific treatment.
Library Wash Buffer	No specific treatment.
Hyb Wash Buffer 1	No specific treatment.
Hyb Wash Buffer 2	No specific treatment.
Resuspension Buffer	No specific treatment.
Soft Conversion Reagent B	No specific treatment.
Soft Conversion Binding Beads	No specific treatment.

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	5X Soft Conversion Wash Buffer	No specific treatment.
	Soft Conversion Elution Buffer	No specific treatment.
	Soft Conversion Repair Solution	No specific treatment.
	Library Binding Beads	No specific treatment.
	Capture Beads	No specific treatment.
	Avida Index Primer Pairs 1-96 for ILM	No specific treatment.
	Avida Index Primer Pairs 97-192 for ILM	No specific treatment.
<b>Protection of first-aiders</b>	<b>:</b> Nuclease-Free Water	No action shall be taken involving any personal risk or without suitable training.
	End Prep Buffer	No action shall be taken involving any personal risk or without suitable training.
	End Prep Enzyme	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	Ligation Buffer	No action shall be taken involving any personal risk or without suitable training.
	Ligation Enzyme	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	Adapter for ILM	No action shall be taken involving any personal risk or without suitable training.
	Hyb Blocker	No action shall be taken involving any personal risk or without suitable training.
	Hyb Buffer	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	Hyb Enhancer	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
	Soft Conversion Reagent A	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
	2X Amplification Mastermix	No action shall be taken involving any personal risk or without suitable training.
	2X Methyl Amplification Mastermix	No action shall be taken involving any personal risk or without suitable training.
	Library Wash Buffer	No action shall be taken involving any personal risk or without suitable training.
	Hyb Wash Buffer 1	No action shall be taken involving any personal risk or without suitable training.
	Hyb Wash Buffer 2	No action shall be taken involving any personal risk or without suitable training.
	Resuspension Buffer	No action shall be taken involving any personal risk or without suitable training.
	Soft Conversion Reagent B	No action shall be taken involving any personal risk

## Section 4. First aid measures

	or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
Soft Conversion Binding Beads	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
5X Soft Conversion Wash Buffer	No action shall be taken involving any personal risk or without suitable training.
Soft Conversion Elution Buffer	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
Soft Conversion Repair Solution	No action shall be taken involving any personal risk or without suitable training.
Library Binding Beads	No action shall be taken involving any personal risk or without suitable training.
Capture Beads	No action shall be taken involving any personal risk or without suitable training.
Avida Index Primer Pairs 1-96 for ILM	No action shall be taken involving any personal risk or without suitable training.
Avida Index Primer Pairs 97-192 for ILM	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

: Nuclease-Free Water	Use an extinguishing agent suitable for the surrounding fire.
End Prep Buffer	Use an extinguishing agent suitable for the surrounding fire.
End Prep Enzyme	Use an extinguishing agent suitable for the surrounding fire.
Ligation Buffer	Use an extinguishing agent suitable for the surrounding fire.
Ligation Enzyme	Use an extinguishing agent suitable for the surrounding fire.
Adapter for ILM	Use an extinguishing agent suitable for the surrounding fire.
Hyb Blocker	Use an extinguishing agent suitable for the surrounding fire.
Hyb Buffer	Use an extinguishing agent suitable for the surrounding fire.
Hyb Enhancer	Use an extinguishing agent suitable for the surrounding fire.
Soft Conversion Reagent A	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
2X Amplification Mastermix	Use an extinguishing agent suitable for the surrounding fire.
2X Methyl Amplification Mastermix	Use an extinguishing agent suitable for the surrounding fire.

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Library Wash Buffer	Use an extinguishing agent suitable for the surrounding fire.
Hyb Wash Buffer 1	Use an extinguishing agent suitable for the surrounding fire.
Hyb Wash Buffer 2	Use an extinguishing agent suitable for the surrounding fire.
Resuspension Buffer	Use an extinguishing agent suitable for the surrounding fire.
Soft Conversion Reagent B	Use an extinguishing agent suitable for the surrounding fire.
Soft Conversion Binding Beads	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
5X Soft Conversion Wash Buffer	Use an extinguishing agent suitable for the surrounding fire.
Soft Conversion Elution Buffer	Use an extinguishing agent suitable for the surrounding fire.
Soft Conversion Repair Solution	Use an extinguishing agent suitable for the surrounding fire.
Library Binding Beads	Use an extinguishing agent suitable for the surrounding fire.
Capture Beads	Use an extinguishing agent suitable for the surrounding fire.
Avida Index Primer Pairs 1-96 for ILM	Use an extinguishing agent suitable for the surrounding fire.
Avida Index Primer Pairs 97-192 for ILM	Use an extinguishing agent suitable for the surrounding fire.
Nuclease-Free Water	None known.
End Prep Buffer	None known.
End Prep Enzyme	None known.
Ligation Buffer	None known.
Ligation Enzyme	None known.
Adapter for ILM	None known.
Hyb Blocker	None known.
Hyb Buffer	None known.
Hyb Enhancer	None known.
Soft Conversion Reagent A	Do not use water jet.
2X Amplification Mastermix	None known.
2X Methyl Amplification Mastermix	None known.
Library Wash Buffer	None known.
Hyb Wash Buffer 1	None known.
Hyb Wash Buffer 2	None known.
Resuspension Buffer	None known.
Soft Conversion Reagent B	None known.
Soft Conversion Binding Beads	Do not use water jet.
5X Soft Conversion Wash Buffer	None known.
Soft Conversion Elution Buffer	None known.
Soft Conversion Repair Solution	None known.
Library Binding Beads	None known.
Capture Beads	None known.
Avida Index Primer Pairs 1-96 for ILM	None known.
Avida Index Primer Pairs 97-192 for ILM	None known.

### Unsuitable extinguishing media

#### 5.2 Special hazards arising from the substance or mixture



## Section 5. Fire-fighting measures

<b>Specific hazards arising from the chemical</b>	: Nuclease-Free Water	In a fire or if heated, a pressure increase will occur and the container may burst.
	End Prep Buffer	In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	End Prep Enzyme	In a fire or if heated, a pressure increase will occur and the container may burst.
	Ligation Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.
	Ligation Enzyme	In a fire or if heated, a pressure increase will occur and the container may burst.
	Adapter for ILM	In a fire or if heated, a pressure increase will occur and the container may burst.
	Hyb Blocker	In a fire or if heated, a pressure increase will occur and the container may burst.
	Hyb Buffer	In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	Hyb Enhancer	In a fire or if heated, a pressure increase will occur and the container may burst.
	Soft Conversion Reagent A	Combustible liquid. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
	2X Amplification Mastermix	In a fire or if heated, a pressure increase will occur and the container may burst.
	2X Methyl Amplification Mastermix	In a fire or if heated, a pressure increase will occur and the container may burst.
	Library Wash Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.
	Hyb Wash Buffer 1	In a fire or if heated, a pressure increase will occur and the container may burst.
	Hyb Wash Buffer 2	In a fire or if heated, a pressure increase will occur and the container may burst.
	Resuspension Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.
	Soft Conversion Reagent B	In a fire or if heated, a pressure increase will occur and the container may burst.
	Soft Conversion Binding Beads	Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is very toxic to aquatic life. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	5X Soft Conversion Wash Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.
	Soft Conversion Elution Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.
	Soft Conversion Repair Solution	In a fire or if heated, a pressure increase will occur and the container may burst.
	Library Binding Beads	In a fire or if heated, a pressure increase will occur

## Section 5. Fire-fighting measures

### Hazardous thermal decomposition products

Capture Beads	and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst.
Avida Index Primer Pairs 1-96 for ILM	In a fire or if heated, a pressure increase will occur and the container may burst.
Avida Index Primer Pairs 97-192 for ILM	In a fire or if heated, a pressure increase will occur and the container may burst.
: Nuclease-Free Water	No specific data.
End Prep Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
End Prep Enzyme	Decomposition products may include the following materials: carbon dioxide carbon monoxide
Ligation Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds
Ligation Enzyme	Decomposition products may include the following materials: carbon dioxide carbon monoxide
Adapter for ILM	No specific data.
Hyb Blocker	No specific data.
Hyb Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides phosphorus oxides halogenated compounds metal oxide/oxides
Hyb Enhancer	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides
Soft Conversion Reagent A	Decomposition products may include the following materials: carbon dioxide carbon monoxide
2X Amplification Mastermix	Decomposition products may include the following materials: carbon dioxide carbon monoxide
2X Methyl Amplification Mastermix	Decomposition products may include the following materials: carbon dioxide carbon monoxide
Library Wash Buffer	Decomposition products may include the following materials: carbon dioxide

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	carbon monoxide halogenated compounds metal oxide/oxides
Hyb Wash Buffer 1	Decomposition products may include the following materials: halogenated compounds metal oxide/oxides
Hyb Wash Buffer 2	No specific data.
Resuspension Buffer	No specific data.
Soft Conversion Reagent B	Decomposition products may include the following materials: nitrogen oxides sulfur oxides
Soft Conversion Binding Beads	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides
5X Soft Conversion Wash Buffer	No specific data.
Soft Conversion Elution Buffer	No specific data.
Soft Conversion Repair Solution	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds
Library Binding Beads	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides
Capture Beads	No specific data.
Avida Index Primer Pairs 1-96 for ILM	No specific data.
Avida Index Primer Pairs 97-192 for ILM	No specific data.

### 5.3 Advice for firefighters

#### **Special protective actions for fire-fighters**

: Nuclease-Free Water	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
End Prep Buffer	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
End Prep Enzyme	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Ligation Buffer	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Ligation Enzyme	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

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Adapter for ILM	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Hyb Blocker	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Hyb Buffer	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Hyb Enhancer	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Soft Conversion Reagent A	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
2X Amplification Mastermix	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
2X Methyl Amplification Mastermix	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Library Wash Buffer	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Hyb Wash Buffer 1	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Hyb Wash Buffer 2	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Resuspension Buffer	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Soft Conversion Reagent B	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Soft Conversion Binding Beads	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
5X Soft Conversion Wash Buffer	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

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Soft Conversion Elution Buffer	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Soft Conversion Repair Solution	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Library Binding Beads	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Capture Beads	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Avida Index Primer Pairs 1-96 for ILM	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Avida Index Primer Pairs 97-192 for ILM	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
<b>Special protective equipment for fire-fighters</b> : Nuclease-Free Water	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
End Prep Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
End Prep Enzyme	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Ligation Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Ligation Enzyme	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Adapter for ILM	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Hyb Blocker	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Hyb Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Hyb Enhancer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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Soft Conversion Reagent A	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
2X Amplification Mastermix	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
2X Methyl Amplification Mastermix	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Library Wash Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Hyb Wash Buffer 1	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Hyb Wash Buffer 2	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Resuspension Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Soft Conversion Reagent B	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Soft Conversion Binding Beads	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
5X Soft Conversion Wash Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Soft Conversion Elution Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Soft Conversion Repair Solution	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Library Binding Beads	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Capture Beads	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Avida Index Primer Pairs 1-96 for ILM	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 5. Fire-fighting measures

Avida Index Primer Pairs 97-192  
for ILM

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

**For non-emergency  
personnel**

: Nuclease-Free Water

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

End Prep Buffer

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

End Prep Enzyme

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Ligation Buffer

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

Ligation Enzyme

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Adapter for ILM

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

Hyb Blocker

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

Hyb Buffer

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not

## Section 6. Accidental release measures

Hyb Enhancer	<p>touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.</p> <p>No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.</p>
Soft Conversion Reagent A	<p>No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.</p>
2X Amplification Mastermix	<p>No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.</p>
2X Methyl Amplification Mastermix	<p>No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.</p>
Library Wash Buffer	<p>No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.</p>
Hyb Wash Buffer 1	<p>No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.</p>
Hyb Wash Buffer 2	<p>No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.</p>
Resuspension Buffer	<p>No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.</p>



## Section 6. Accidental release measures

Soft Conversion Reagent B	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
Soft Conversion Binding Beads	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
5X Soft Conversion Wash Buffer	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
Soft Conversion Elution Buffer	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
Soft Conversion Repair Solution	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
Library Binding Beads	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
Capture Beads	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
Avida Index Primer Pairs 1-96 for ILM	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
Avida Index Primer Pairs 97-192 for ILM	No action shall be taken involving any personal risk or without suitable training. Evacuate



## Section 6. Accidental release measures

Hyb Wash Buffer 2	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Resuspension Buffer	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Soft Conversion Reagent B	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Soft Conversion Binding Beads	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
5X Soft Conversion Wash Buffer	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Soft Conversion Elution Buffer	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Soft Conversion Repair Solution	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Library Binding Beads	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Capture Beads	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Avida Index Primer Pairs 1-96 for ILM	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Avida Index Primer Pairs 97-192 for ILM	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

: Nuclease-Free Water	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
End Prep Buffer	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
End Prep Enzyme	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has

## Section 6. Accidental release measures

Ligation Buffer	caused environmental pollution (sewers, waterways, soil or air). Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Ligation Enzyme	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Adapter for ILM	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Hyb Blocker	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Hyb Buffer	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
Hyb Enhancer	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Soft Conversion Reagent A	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
2X Amplification Mastermix	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
2X Methyl Amplification Mastermix	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Library Wash Buffer	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Hyb Wash Buffer 1	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Hyb Wash Buffer 2	Avoid dispersal of spilled material and runoff and

## Section 6. Accidental release measures

	contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Resuspension Buffer	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Soft Conversion Reagent B	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Soft Conversion Binding Beads	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.
5X Soft Conversion Wash Buffer	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Soft Conversion Elution Buffer	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Soft Conversion Repair Solution	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Library Binding Beads	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Capture Beads	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Avida Index Primer Pairs 1-96 for ILM	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Avida Index Primer Pairs 97-192 for ILM	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### 6.3 Methods and materials for containment and cleaning up

## Section 6. Accidental release measures

<b>Methods for cleaning up</b>	: Nuclease-Free Water	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	End Prep Buffer	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	End Prep Enzyme	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	Ligation Buffer	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	Ligation Enzyme	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	Adapter for ILM	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	Hyb Blocker	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	Hyb Buffer	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	Hyb Enhancer	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	Soft Conversion Reagent A	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of

## Section 6. Accidental release measures

2X Amplification Mastermix	via a licensed waste disposal contractor. Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
2X Methyl Amplification Mastermix	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Library Wash Buffer	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Hyb Wash Buffer 1	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Hyb Wash Buffer 2	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Resuspension Buffer	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Soft Conversion Reagent B	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Soft Conversion Binding Beads	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
5X Soft Conversion Wash Buffer	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Soft Conversion Elution Buffer	Stop leak if without risk. Move containers from spill area. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in

## Section 6. Accidental release measures

Soft Conversion Repair Solution	container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Library Binding Beads	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Capture Beads	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Avida Index Primer Pairs 1-96 for ILM	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Avida Index Primer Pairs 97-192 for ILM	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

### 7.1 Precautions for safe handling

<b>Protective measures</b>		
	: Nuclease-Free Water	Put on appropriate personal protective equipment (see Section 8).
	End Prep Buffer	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
	End Prep Enzyme	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
	Ligation Buffer	Put on appropriate personal protective equipment (see Section 8).
	Ligation Enzyme	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or



## Section 7. Handling and storage

	mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Adapter for ILM	Put on appropriate personal protective equipment (see Section 8).
Hyb Blocker	Put on appropriate personal protective equipment (see Section 8).
Hyb Buffer	Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Hyb Enhancer	Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Soft Conversion Reagent A	Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.
2X Amplification Mastermix	Put on appropriate personal protective equipment (see Section 8).
2X Methyl Amplification Mastermix	Put on appropriate personal protective equipment (see Section 8).
Library Wash Buffer	Put on appropriate personal protective equipment (see Section 8).
Hyb Wash Buffer 1	Put on appropriate personal protective equipment

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Hyb Wash Buffer 2	(see Section 8). Put on appropriate personal protective equipment (see Section 8).
Resuspension Buffer	Put on appropriate personal protective equipment (see Section 8).
Soft Conversion Reagent B	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Soft Conversion Binding Beads	Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
5X Soft Conversion Wash Buffer	Put on appropriate personal protective equipment (see Section 8).
Soft Conversion Elution Buffer	Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container.
Soft Conversion Repair Solution	Put on appropriate personal protective equipment (see Section 8).
Library Binding Beads	Put on appropriate personal protective equipment (see Section 8).
Capture Beads	Put on appropriate personal protective equipment (see Section 8).
Avida Index Primer Pairs 1-96 for ILM	Put on appropriate personal protective equipment (see Section 8).
Avida Index Primer Pairs 97-192 for ILM	Put on appropriate personal protective equipment (see Section 8).

## Section 7. Handling and storage

### Advice on general occupational hygiene

: Nuclease-Free Water

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

End Prep Buffer

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

End Prep Enzyme

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Ligation Buffer

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Ligation Enzyme

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Adapter for ILM

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Hyb Blocker

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Hyb Buffer

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Hyb Enhancer

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove

## Section 7. Handling and storage

Soft Conversion Reagent A	contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
2X Amplification Mastermix	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
2X Methyl Amplification Mastermix	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Library Wash Buffer	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Hyb Wash Buffer 1	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Hyb Wash Buffer 2	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Resuspension Buffer	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Soft Conversion Reagent B	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Soft Conversion Binding Beads	Eating, drinking and smoking should be prohibited

## Section 7. Handling and storage

5X Soft Conversion Wash Buffer

in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Soft Conversion Elution Buffer

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Soft Conversion Repair Solution

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Library Binding Beads

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Capture Beads

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Avida Index Primer Pairs 1-96 for ILM

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Avida Index Primer Pairs 97-192 for ILM

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## Section 7. Handling and storage

### 7.2 Conditions for safe storage, including any incompatibilities

: Nuclease-Free Water

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

End Prep Buffer

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

End Prep Enzyme

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Ligation Buffer

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Ligation Enzyme

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Adapter for ILM

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed

## Section 7. Handling and storage

Hyb Blocker

until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Hyb Buffer

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Hyb Enhancer

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Soft Conversion Reagent A

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers.

Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

2X Amplification Mastermix

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed

## Section 7. Handling and storage

2X Methyl Amplification Mastermix

until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Library Wash Buffer

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Hyb Wash Buffer 1

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Hyb Wash Buffer 2

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Resuspension Buffer

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for



## Section 7. Handling and storage

### Soft Conversion Reagent B

incompatible materials before handling or use. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### Soft Conversion Binding Beads

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### 5X Soft Conversion Wash Buffer

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### Soft Conversion Elution Buffer

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### Soft Conversion Repair Solution

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 7. Handling and storage

Library Binding Beads	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Capture Beads	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Avida Index Primer Pairs 1-96 for ILM	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Avida Index Primer Pairs 97-192 for ILM	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### 7.3 Specific end use(s)

#### Recommendations

: Nuclease-Free Water	Industrial applications, Professional applications.
End Prep Buffer	Industrial applications, Professional applications.
End Prep Enzyme	Industrial applications, Professional applications.
Ligation Buffer	Industrial applications, Professional applications.
Ligation Enzyme	Industrial applications, Professional applications.
Adapter for ILM	Industrial applications, Professional applications.
Hyb Blocker	Industrial applications, Professional applications.
Hyb Buffer	Industrial applications, Professional applications.
Hyb Enhancer	Industrial applications, Professional applications.
Soft Conversion Reagent A	Industrial applications, Professional applications.
2X Amplification Mastermix	Industrial applications, Professional applications.
2X Methyl Amplification Mastermix	Industrial applications, Professional applications.

## Section 7. Handling and storage

Library Wash Buffer	Industrial applications, Professional applications.
Hyb Wash Buffer 1	Industrial applications, Professional applications.
Hyb Wash Buffer 2	Industrial applications, Professional applications.
Resuspension Buffer	Industrial applications, Professional applications.
Soft Conversion Reagent B	Industrial applications, Professional applications.
Soft Conversion Binding Beads	Industrial applications, Professional applications.
5X Soft Conversion Wash Buffer	Industrial applications, Professional applications.
Soft Conversion Elution Buffer	Industrial applications, Professional applications.
Soft Conversion Repair Solution	Industrial applications, Professional applications.
Library Binding Beads	Industrial applications, Professional applications.
Capture Beads	Industrial applications, Professional applications.
Avida Index Primer Pairs 1-96 for ILM	Industrial applications, Professional applications.
Avida Index Primer Pairs 97-192 for ILM	Industrial applications, Professional applications.
<b>Industrial sector specific solutions</b> : Nuclease-Free Water	Not available.
End Prep Buffer	Not available.
End Prep Enzyme	Not available.
Ligation Buffer	Not available.
Ligation Enzyme	Not available.
Adapter for ILM	Not available.
Hyb Blocker	Not available.
Hyb Buffer	Not available.
Hyb Enhancer	Not available.
Soft Conversion Reagent A	Not available.
2X Amplification Mastermix	Not available.
2X Methyl Amplification Mastermix	Not available.
Library Wash Buffer	Not available.
Hyb Wash Buffer 1	Not available.
Hyb Wash Buffer 2	Not available.
Resuspension Buffer	Not available.
Soft Conversion Reagent B	Not available.
Soft Conversion Binding Beads	Not available.
5X Soft Conversion Wash Buffer	Not available.
Soft Conversion Elution Buffer	Not available.
Soft Conversion Repair Solution	Not available.
Library Binding Beads	Not available.
Capture Beads	Not available.
Avida Index Primer Pairs 1-96 for ILM	Not available.
Avida Index Primer Pairs 97-192 for ILM	Not available.

## Section 8. Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
<b>Nuclease-Free Water</b> water	None.
<b>End Prep Buffer</b> Magnesium chloride	None.
<b>End Prep Enzyme</b> Glycerol	<b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Respirable fraction TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Total dust

**Section 8. Exposure controls/personal protection****Ligation Enzyme**

Glycerol

**OSHA PEL (United States, 5/2018).**TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fractionTWA: 15 mg/m<sup>3</sup> 8 hours. Form: Total dust**CAL OSHA PEL (United States, 5/2018).**TWA: 5 mg/m<sup>3</sup> 8 hours. Form: respirable fractionTWA: 10 mg/m<sup>3</sup> 8 hours. Form: total dust**OSHA PEL 1989 (United States, 3/1989).**TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fractionTWA: 10 mg/m<sup>3</sup> 8 hours. Form: Total dust**OSHA PEL (United States, 5/2018).**TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fractionTWA: 15 mg/m<sup>3</sup> 8 hours. Form: Total dust**CAL OSHA PEL (United States, 5/2018).**TWA: 5 mg/m<sup>3</sup> 8 hours. Form: respirable fractionTWA: 10 mg/m<sup>3</sup> 8 hours. Form: total dust

None.

None.

None.

**Hyb Buffer**

tetramethylammonium chloride

Dextran sulfate sodium

Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.

omega.-hydroxy-

**Hyb Enhancer**

Formamide

**ACGIH TLV (United States, 1/2023).****Absorbed through skin.**

TWA: 1 ppm 8 hours.

**OSHA PEL 1989 (United States, 3/1989).**

TWA: 20 ppm 8 hours.

TWA: 30 mg/m<sup>3</sup> 8 hours.

STEL: 30 ppm 15 minutes.

STEL: 45 mg/m<sup>3</sup> 15 minutes.**NIOSH REL (United States, 10/2020).****Absorbed through skin.**

TWA: 10 ppm 10 hours.

TWA: 15 mg/m<sup>3</sup> 10 hours.**CAL OSHA PEL (United States, 5/2018).****Absorbed through skin.**TWA: 18 mg/m<sup>3</sup> 8 hours.

TWA: 10 ppm 8 hours.

**Soft Conversion Reagent A**

tetrahydro-2-furylmethanol

**OARS WEEL (United States, 4/2022).****Absorbed through skin.**

TWA: 0.5 ppm 8 hours.

**2X Amplification Mastermix**

Glycerol

**OSHA PEL 1989 (United States, 3/1989).**TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fractionTWA: 10 mg/m<sup>3</sup> 8 hours. Form: Total dust**OSHA PEL (United States, 5/2018).**

## Section 8. Exposure controls/personal protection

	<p>TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction                  TWA: 15 mg/m<sup>3</sup> 8 hours. Form: Total dust  <b>CAL OSHA PEL (United States, 5/2018).</b>                  TWA: 5 mg/m<sup>3</sup> 8 hours. Form: respirable fraction                  TWA: 10 mg/m<sup>3</sup> 8 hours. Form: total dust</p>
<p><b>Hyb Wash Buffer 1</b>                  Sodium dodecyl sulphate</p>	None.
<p><b>Hyb Wash Buffer 2</b>                  Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-</p>	None.
<p><b>Soft Conversion Reagent B</b>                  ammonium hydrogensulphite</p>	None.
<p><b>Soft Conversion Binding Beads</b>                  Ethanol</p>	<p><b>ACGIH TLV (United States, 1/2023).</b>                  STEL: 1000 ppm 15 minutes.  <b>OSHA PEL 1989 (United States, 3/1989).</b>                  TWA: 1000 ppm 8 hours.                  TWA: 1900 mg/m<sup>3</sup> 8 hours.  <b>NIOSH REL (United States, 10/2020).</b>                  TWA: 1000 ppm 10 hours.                  TWA: 1900 mg/m<sup>3</sup> 10 hours.  <b>OSHA PEL (United States, 5/2018).</b>                  TWA: 1000 ppm 8 hours.                  TWA: 1900 mg/m<sup>3</sup> 8 hours.  <b>CAL OSHA PEL (United States, 5/2018).</b>                  TWA: 1900 mg/m<sup>3</sup> 8 hours.                  TWA: 1000 ppm 8 hours.</p>
<p>Guanidinium thiocyanate                  Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-</p>	<p>None.                  None.</p>

### Biological exposure indices

No exposure indices known.

### 8.2 Exposure controls

#### **Appropriate engineering controls**

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

#### **Environmental exposure controls**

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

#### **Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

## Section 8. Exposure controls/personal protection

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

<b>Physical state</b>	: Nuclease-Free Water	Liquid.
	End Prep Buffer	Liquid.
	End Prep Enzyme	Liquid.
	Ligation Buffer	Liquid.
	Ligation Enzyme	Liquid.
	Adapter for ILM	Liquid.
	Hyb Blocker	Liquid.
	Hyb Buffer	Liquid.
	Hyb Enhancer	Liquid.
	Soft Conversion Reagent A	Liquid.
	2X Amplification Mastermix	Liquid.
	2X Methyl Amplification Mastermix	Liquid. [Clear.]
	Library Wash Buffer	Liquid.
	Hyb Wash Buffer 1	Liquid.
	Hyb Wash Buffer 2	Liquid.
	Resuspension Buffer	Liquid.
	Soft Conversion Reagent B	Liquid.
	Soft Conversion Binding Beads	Liquid.
	5X Soft Conversion Wash Buffer	Liquid.
	Soft Conversion Elution Buffer	Liquid.
	Soft Conversion Repair Solution	Liquid.
	Library Binding Beads	Liquid.
	Capture Beads	Liquid.
	Avida Index Primer Pairs 1-96 for ILM	Liquid.
	Avida Index Primer Pairs 97-192 for ILM	Liquid.

## Section 9. Physical and chemical properties and safety characteristics

<b>Color</b>	:	Nuclease-Free Water	Colorless.
		End Prep Buffer	Not available.
		End Prep Enzyme	Not available.
		Ligation Buffer	Not available.
		Ligation Enzyme	Not available.
		Adapter for ILM	Not available.
		Hyb Blocker	Not available.
		Hyb Buffer	Not available.
		Hyb Enhancer	Not available.
		Soft Conversion Reagent A	Not available.
		2X Amplification Mastermix	Not available.
		2X Methyl Amplification Mastermix	Not available.
		Library Wash Buffer	Not available.
		Hyb Wash Buffer 1	Not available.
		Hyb Wash Buffer 2	Not available.
		Resuspension Buffer	Not available.
		Soft Conversion Reagent B	Not available.
		Soft Conversion Binding Beads	Not available.
		5X Soft Conversion Wash Buffer	Not available.
		Soft Conversion Elution Buffer	Not available.
		Soft Conversion Repair Solution	Not available.
		Library Binding Beads	Not available.
		Capture Beads	Not available.
		Avida Index Primer Pairs 1-96 for ILM	Not available.
		Avida Index Primer Pairs 97-192 for ILM	Not available.

<b>Odor</b>	:	Nuclease-Free Water	Odorless.
		End Prep Buffer	Not available.
		End Prep Enzyme	Not available.
		Ligation Buffer	Not available.
		Ligation Enzyme	Not available.
		Adapter for ILM	Not available.
		Hyb Blocker	Not available.
		Hyb Buffer	Not available.
		Hyb Enhancer	Not available.
		Soft Conversion Reagent A	Not available.
		2X Amplification Mastermix	Not available.
		2X Methyl Amplification Mastermix	Not available.
		Library Wash Buffer	Not available.
		Hyb Wash Buffer 1	Not available.
		Hyb Wash Buffer 2	Not available.
		Resuspension Buffer	Not available.
		Soft Conversion Reagent B	Not available.
		Soft Conversion Binding Beads	Not available.
		5X Soft Conversion Wash Buffer	Not available.
		Soft Conversion Elution Buffer	Not available.
		Soft Conversion Repair Solution	Not available.
		Library Binding Beads	Not available.
		Capture Beads	Not available.
		Avida Index Primer Pairs 1-96 for ILM	Not available.
		Avida Index Primer Pairs 97-192 for ILM	Not available.

## Section 9. Physical and chemical properties and safety characteristics

<b>Odor threshold</b>	:	Nuclease-Free Water	Not available.
		End Prep Buffer	Not available.
		End Prep Enzyme	Not available.
		Ligation Buffer	Not available.
		Ligation Enzyme	Not available.
		Adapter for ILM	Not available.
		Hyb Blocker	Not available.
		Hyb Buffer	Not available.
		Hyb Enhancer	Not available.
		Soft Conversion Reagent A	Not available.
		2X Amplification Mastermix	Not available.
		2X Methyl Amplification Mastermix	Not available.
		Library Wash Buffer	Not available.
		Hyb Wash Buffer 1	Not available.
		Hyb Wash Buffer 2	Not available.
		Resuspension Buffer	Not available.
		Soft Conversion Reagent B	Not available.
		Soft Conversion Binding Beads	Not available.
		5X Soft Conversion Wash Buffer	Not available.
		Soft Conversion Elution Buffer	Not available.
		Soft Conversion Repair Solution	Not available.
		Library Binding Beads	Not available.
		Capture Beads	Not available.
		Avida Index Primer Pairs 1-96 for ILM	Not available.
		Avida Index Primer Pairs 97-192 for ILM	Not available.

<b>pH</b>	:	Nuclease-Free Water	7
		End Prep Buffer	8
		End Prep Enzyme	7.5
		Ligation Buffer	8
		Ligation Enzyme	7.5
		Adapter for ILM	8
		Hyb Blocker	8
		Hyb Buffer	7.5
		Hyb Enhancer	Not available.
		Soft Conversion Reagent A	Not available.
		2X Amplification Mastermix	Not available.
		2X Methyl Amplification Mastermix	8.6
		Library Wash Buffer	Not available.
		Hyb Wash Buffer 1	7.2 to 7.6
		Hyb Wash Buffer 2	7.2 to 7.6
		Resuspension Buffer	8
		Soft Conversion Reagent B	4.5 to 5.5
		Soft Conversion Binding Beads	Not available.
		5X Soft Conversion Wash Buffer	Not available.
		Soft Conversion Elution Buffer	13
		Soft Conversion Repair Solution	8
		Library Binding Beads	8
		Capture Beads	Not available.
		Avida Index Primer Pairs 1-96 for ILM	8
		Avida Index Primer Pairs 97-192 for ILM	8



## Section 9. Physical and chemical properties and safety characteristics

<b>Melting point/freezing point</b>	Nuclease-Free Water	0°C (32°F)
	End Prep Buffer	Not available.
	End Prep Enzyme	Not available.
	Ligation Buffer	Not available.
	Ligation Enzyme	Not available.
	Adapter for ILM	0°C (32°F)
	Hyb Blocker	0°C (32°F)
	Hyb Buffer	Not available.
	Hyb Enhancer	Not available.
	Soft Conversion Reagent A	<-120°C (<-184°F)
	2X Amplification Mastermix	Not available.
	2X Methyl Amplification Mastermix	Not available.
	Library Wash Buffer	Not available.
	Hyb Wash Buffer 1	Not available.
	Hyb Wash Buffer 2	0°C (32°F)
	Resuspension Buffer	0°C (32°F)
	Soft Conversion Reagent B	Not available.
	Soft Conversion Binding Beads	Not available.
	5X Soft Conversion Wash Buffer	0°C (32°F)
	Soft Conversion Elution Buffer	Not available.
	Soft Conversion Repair Solution	Not available.
	Library Binding Beads	Not available.
	Capture Beads	Not available.
	Avida Index Primer Pairs 1-96 for ILM	0°C (32°F)
	Avida Index Primer Pairs 97-192 for ILM	0°C (32°F)

<b>Boiling point, initial boiling point, and boiling range</b>	Nuclease-Free Water	100°C (212°F)
	End Prep Buffer	Not available.
	End Prep Enzyme	Not available.
	Ligation Buffer	Not available.
	Ligation Enzyme	Not available.
	Adapter for ILM	100°C (212°F)
	Hyb Blocker	100°C (212°F)
	Hyb Buffer	Not available.
	Hyb Enhancer	Not available.
	Soft Conversion Reagent A	177.7°C (351.9°F)
	2X Amplification Mastermix	Not available.
	2X Methyl Amplification Mastermix	Not available.
	Library Wash Buffer	Not available.
	Hyb Wash Buffer 1	Not available.
	Hyb Wash Buffer 2	100°C (212°F)
	Resuspension Buffer	100°C (212°F)
	Soft Conversion Reagent B	Not available.
	Soft Conversion Binding Beads	Not available.
	5X Soft Conversion Wash Buffer	100°C (212°F)
	Soft Conversion Elution Buffer	Not available.
	Soft Conversion Repair Solution	Not available.
	Library Binding Beads	Not available.
	Capture Beads	Not available.
	Avida Index Primer Pairs 1-96 for ILM	100°C (212°F)
	Avida Index Primer Pairs 97-192 for ILM	100°C (212°F)

## Section 9. Physical and chemical properties and safety characteristics

<b>Flash point</b>	:	Nuclease-Free Water	Not available.
		End Prep Buffer	Not available.
		End Prep Enzyme	Not available.
		Ligation Buffer	Not available.
		Ligation Enzyme	Not available.
		Adapter for ILM	Not available.
		Hyb Blocker	Not available.
		Hyb Buffer	Not available.
		Hyb Enhancer	Not available.
		Soft Conversion Reagent A	Closed cup: 73°C (163.4°F)
		2X Amplification Mastermix	Not available.
		2X Methyl Amplification Mastermix	Not available.
		Library Wash Buffer	Not available.
		Hyb Wash Buffer 1	Not available.
		Hyb Wash Buffer 2	Not available.
		Resuspension Buffer	Not available.
		Soft Conversion Reagent B	Not available.
		Soft Conversion Binding Beads	Closed cup: 37.8 to 61°C (100 to 141.8°F)
		5X Soft Conversion Wash Buffer	Not available.
		Soft Conversion Elution Buffer	Not available.
		Soft Conversion Repair Solution	Not available.
		Library Binding Beads	Not available.
		Capture Beads	Not available.
		Avida Index Primer Pairs 1-96 for ILM	Not available.
		Avida Index Primer Pairs 97-192 for ILM	Not available.

Ingredient name	Closed cup			Open cup		
	°C	°F	Method	°C	°F	Method
<b>End Prep Enzyme</b>						
Glycerol	-	-	-	177	350.6	-
<b>Ligation Enzyme</b>						
Glycerol	-	-	-	177	350.6	-
<b>Hyb Enhancer</b>						
Formamide	150	302	-	152	305.6	DIN EN ISO 2592
<b>2X Amplification Mastermix</b>						
Glycerol	-	-	-	177	350.6	-

<b>Evaporation rate</b>	:	Nuclease-Free Water	Not available.
		End Prep Buffer	Not available.
		End Prep Enzyme	Not available.
		Ligation Buffer	Not available.
		Ligation Enzyme	Not available.
		Adapter for ILM	Not available.
		Hyb Blocker	Not available.
		Hyb Buffer	Not available.
		Hyb Enhancer	Not available.
		Soft Conversion Reagent A	Not available.

## Section 9. Physical and chemical properties and safety characteristics

2X Amplification Mastermix	Not available.
2X Methyl Amplification Mastermix	Not available.
Library Wash Buffer	Not available.
Hyb Wash Buffer 1	Not available.
Hyb Wash Buffer 2	Not available.
Resuspension Buffer	Not available.
Soft Conversion Reagent B	Not available.
Soft Conversion Binding Beads	Not available.
5X Soft Conversion Wash Buffer	Not available.
Soft Conversion Elution Buffer	Not available.
Soft Conversion Repair Solution	Not available.
Library Binding Beads	Not available.
Capture Beads	Not available.
Avida Index Primer Pairs 1-96 for ILM	Not available.
Avida Index Primer Pairs 97-192 for ILM	Not available.

### Flammability

: Nuclease-Free Water	Not applicable.
End Prep Buffer	Not applicable.
End Prep Enzyme	Not applicable.
Ligation Buffer	Not applicable.
Ligation Enzyme	Not applicable.
Adapter for ILM	Not applicable.
Hyb Blocker	Not applicable.
Hyb Buffer	Not applicable.
Hyb Enhancer	Not applicable.
Soft Conversion Reagent A	Not applicable.
2X Amplification Mastermix	Not applicable.
2X Methyl Amplification Mastermix	Not applicable.
Library Wash Buffer	Not applicable.
Hyb Wash Buffer 1	Not applicable.
Hyb Wash Buffer 2	Not applicable.
Resuspension Buffer	Not applicable.
Soft Conversion Reagent B	Not applicable.
Soft Conversion Binding Beads	Not applicable.
5X Soft Conversion Wash Buffer	Not applicable.
Soft Conversion Elution Buffer	Not applicable.
Soft Conversion Repair Solution	Not applicable.
Library Binding Beads	Not applicable.
Capture Beads	Not applicable.
Avida Index Primer Pairs 1-96 for ILM	Not applicable.
Avida Index Primer Pairs 97-192 for ILM	Not applicable.

### Lower and upper explosion limit/flammability limit

: Nuclease-Free Water	Not available.
End Prep Buffer	Not available.
End Prep Enzyme	Not available.
Ligation Buffer	Not available.
Ligation Enzyme	Not available.
Adapter for ILM	Not available.
Hyb Blocker	Not available.
Hyb Buffer	Not available.
Hyb Enhancer	Not available.
Soft Conversion Reagent A	Not available.
2X Amplification Mastermix	Not available.
2X Methyl Amplification Mastermix	Not available.
Library Wash Buffer	Not available.
Hyb Wash Buffer 1	Not available.
Hyb Wash Buffer 2	Not available.
Resuspension Buffer	Not available.

## Section 9. Physical and chemical properties and safety characteristics

Soft Conversion Reagent B	Not available.
Soft Conversion Binding Beads	Not available.
5X Soft Conversion Wash Buffer	Not available.
Soft Conversion Elution Buffer	Not available.
Soft Conversion Repair Solution	Not available.
Library Binding Beads	Not available.
Capture Beads	Not available.
Avida Index Primer Pairs 1-96 for ILM	Not available.
Avida Index Primer Pairs 97-192 for ILM	Not available.

### Vapor pressure

: Nuclease-Free Water	2.3 kPa (17.5 mm Hg) [room temperature] 12.3 kPa (92.258 mm Hg) [50°C (122°F)]
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Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
<b>End Prep Buffer</b>						
water	17.5	2.3	-	92.258	12.3	-
<b>End Prep Enzyme</b>						
water	17.5	2.3	-	92.258	12.3	-
Glycerol	0.000075	0.00001	-	0.0025	0.00033	-
<b>Ligation Buffer</b>						
water	17.5	2.3	-	92.258	12.3	-
<b>Ligation Enzyme</b>						
water	17.5	2.3	-	92.258	12.3	-
Glycerol	0.000075	0.00001	-	0.0025	0.00033	-
<b>Adapter for ILM</b>						
water	17.5	2.3	-	92.258	12.3	-
<b>Hyb Blocker</b>						
water	17.5	2.3	-	92.258	12.3	-
<b>Hyb Buffer</b>						
water	17.5	2.3	-	92.258	12.3	-
tetramethylammonium chloride	0.000000001	0.00000000013	EU A.4	-	-	-
<b>Hyb Enhancer</b>						
Formamide	0.045	0.006	-	-	-	-

**Section 9. Physical and chemical properties and safety characteristics**

<b>Soft Conversion Reagent A</b>							
tetrahydro-2-furylmethanol	1.4	0.19	-	-	-	-	-
<b>2X Amplification Mastermix</b>							
Glycerol	0.000075	0.00001	-	0.0025	0.00033	-	-
<b>2X Methyl Amplification Mastermix</b>							
water	17.5	2.3	-	92.258	12.3	-	-
<b>Library Wash Buffer</b>							
water	17.5	2.3	-	92.258	12.3	-	-
<b>Hyb Wash Buffer 1</b>							
water	17.5	2.3	-	92.258	12.3	-	-
<b>Hyb Wash Buffer 2</b>							
water	17.5	2.3	-	92.258	12.3	-	-
<b>Resuspension Buffer</b>							
water	17.5	2.3	-	92.258	12.3	-	-
<b>Soft Conversion Reagent B</b>							
water	17.5	2.3	-	92.258	12.3	-	-
<b>Soft Conversion Binding Beads</b>							
Ethanol	42.94865	5.7	-	-	-	-	-
water	17.5	2.3	-	92.258	12.3	-	-
<b>5X Soft Conversion Wash Buffer</b>							

## Section 9. Physical and chemical properties and safety characteristics

water	17.5	2.3	-	92.258	12.3	-
<b>Soft Conversion Elution Buffer</b>						
water	17.5	2.3	-	92.258	12.3	-
<b>Soft Conversion Repair Solution</b>						
water	17.5	2.3	-	92.258	12.3	-
<b>Library Binding Beads</b>						
water	17.5	2.3	-	92.258	12.3	-
<b>Capture Beads</b>						
water	17.5	2.3	-	92.258	12.3	-
<b>Avida Index Primer Pairs 1-96 for ILM</b>						
water	17.5	2.3	-	92.258	12.3	-
<b>Avida Index Primer Pairs 97-192 for ILM</b>						
water	17.5	2.3	-	92.258	12.3	-

### Relative vapor density

: Nuclease-Free Water	0.62 [Air = 1]
End Prep Buffer	Not available.
End Prep Enzyme	Not available.
Ligation Buffer	Not available.
Ligation Enzyme	Not available.
Adapter for ILM	Not available.
Hyb Blocker	Not available.
Hyb Buffer	Not available.
Hyb Enhancer	Not available.
Soft Conversion Reagent A	Not available.
2X Amplification Mastermix	Not available.
2X Methyl Amplification Mastermix	Not available.
Library Wash Buffer	Not available.
Hyb Wash Buffer 1	Not available.
Hyb Wash Buffer 2	Not available.
Resuspension Buffer	Not available.
Soft Conversion Reagent B	Not available.
Soft Conversion Binding Beads	Not available.
5X Soft Conversion Wash Buffer	Not available.
Soft Conversion Elution Buffer	Not available.
Soft Conversion Repair Solution	Not available.
Library Binding Beads	Not available.
Capture Beads	Not available.

## Section 9. Physical and chemical properties and safety characteristics

	Avida Index Primer Pairs 1-96 for ILM	Not available.
	Avida Index Primer Pairs 97-192 for ILM	Not available.
<b>Relative density</b>	: Nuclease-Free Water	1
	End Prep Buffer	Not available.
	End Prep Enzyme	Not available.
	Ligation Buffer	Not available.
	Ligation Enzyme	Not available.
	Adapter for ILM	Not available.
	Hyb Blocker	Not available.
	Hyb Buffer	Not available.
	Hyb Enhancer	Not available.
	Soft Conversion Reagent A	Not available.
	2X Amplification Mastermix	Not available.
	2X Methyl Amplification Mastermix	Not available.
	Library Wash Buffer	Not available.
	Hyb Wash Buffer 1	Not available.
	Hyb Wash Buffer 2	Not available.
	Resuspension Buffer	Not available.
	Soft Conversion Reagent B	Not available.
	Soft Conversion Binding Beads	Not available.
	5X Soft Conversion Wash Buffer	Not available.
	Soft Conversion Elution Buffer	Not available.
	Soft Conversion Repair Solution	Not available.
	Library Binding Beads	Not available.
	Capture Beads	Not available.
	Avida Index Primer Pairs 1-96 for ILM	Not available.
	Avida Index Primer Pairs 97-192 for ILM	Not available.

**Solubility(ies)**

Media	Result
<b>Nuclease-Free Water</b>	
water	Soluble
<b>End Prep Buffer</b>	
water	Soluble
<b>End Prep Enzyme</b>	
water	Soluble
<b>Ligation Buffer</b>	
water	Soluble
<b>Ligation Enzyme</b>	
water	Soluble
<b>Adapter for ILM</b>	
water	Soluble
<b>Hyb Blocker</b>	
water	Soluble
<b>Hyb Buffer</b>	
water	Soluble
<b>Hyb Enhancer</b>	
water	Soluble
<b>Soft Conversion Reagent A</b>	
water	Soluble
<b>2X Methyl Amplification Mastermix</b>	
water	Soluble
<b>Library Wash Buffer</b>	
water	Soluble
<b>Hyb Wash Buffer 1</b>	
water	Soluble
<b>Hyb Wash Buffer 2</b>	

## Section 9. Physical and chemical properties and safety characteristics

water	Soluble
<b>Resuspension Buffer</b>	
water	Soluble
<b>Soft Conversion Reagent B</b>	
water	Soluble
<b>Soft Conversion Binding Beads</b>	
water	Soluble
<b>5X Soft Conversion Wash Buffer</b>	
water	Soluble
<b>Soft Conversion Elution Buffer</b>	
water	Soluble
<b>Soft Conversion Repair Solution</b>	
water	Soluble
<b>Library Binding Beads</b>	
water	Soluble
<b>Capture Beads</b>	
water	Soluble
<b>Avida Index Primer Pairs 1-96 for ILM</b>	
water	Soluble
<b>Avida Index Primer Pairs 97-192 for ILM</b>	
water	Soluble

### Partition coefficient: n-octanol/water

: Nuclease-Free Water	-1.38
End Prep Buffer	Not applicable.
End Prep Enzyme	Not applicable.
Ligation Buffer	Not applicable.
Ligation Enzyme	Not applicable.
Adapter for ILM	Not applicable.
Hyb Blocker	Not applicable.
Hyb Buffer	Not applicable.
Hyb Enhancer	Not applicable.
Soft Conversion Reagent A	Not applicable.
2X Amplification Mastermix	Not applicable.
2X Methyl Amplification Mastermix	Not applicable.
Library Wash Buffer	Not applicable.
Hyb Wash Buffer 1	Not applicable.
Hyb Wash Buffer 2	Not applicable.
Resuspension Buffer	Not applicable.
Soft Conversion Reagent B	Not applicable.
Soft Conversion Binding Beads	Not applicable.
5X Soft Conversion Wash Buffer	Not applicable.
Soft Conversion Elution Buffer	Not applicable.
Soft Conversion Repair Solution	Not applicable.
Library Binding Beads	Not applicable.
Capture Beads	Not applicable.
Avida Index Primer Pairs 1-96 for ILM	Not applicable.
Avida Index Primer Pairs 97-192 for ILM	Not applicable.

### Auto-ignition temperature

: Nuclease-Free Water	Not applicable.
2X Methyl Amplification Mastermix	215°C (419°F)



**Section 9. Physical and chemical properties and safety characteristics**

<b>Ingredient name</b>	<b>°C</b>	<b>°F</b>	<b>Method</b>
<b>End Prep Enzyme</b>			
Glycerol	370	698	-
<b>Ligation Enzyme</b>			
Glycerol	370	698	-
<b>Hyb Enhancer</b>			
Formamide	>500	>932	ASTM D 2155-66
<b>Soft Conversion Reagent A</b>			
tetrahydro-2-furylmethanol	282	539.6	-
<b>2X Amplification Mastermix</b>			
Glycerol	370	698	-
<b>Soft Conversion Binding Beads</b>			
Ethanol	455	851	DIN 51794

<b>Decomposition temperature :</b>	Nuclease-Free Water	Not available.
	End Prep Buffer	Not available.
	End Prep Enzyme	Not available.
	Ligation Buffer	Not available.
	Ligation Enzyme	Not available.
	Adapter for ILM	Not available.
	Hyb Blocker	Not available.
	Hyb Buffer	Not available.
	Hyb Enhancer	Not available.
	Soft Conversion Reagent A	Not available.
	2X Amplification Mastermix	Not available.
	2X Methyl Amplification Mastermix	Not available.
	Library Wash Buffer	Not available.
	Hyb Wash Buffer 1	Not available.
	Hyb Wash Buffer 2	Not available.
	Resuspension Buffer	Not available.
	Soft Conversion Reagent B	Not available.
	Soft Conversion Binding Beads	Not available.
	5X Soft Conversion Wash Buffer	Not available.
	Soft Conversion Elution Buffer	Not available.
	Soft Conversion Repair Solution	Not available.
	Library Binding Beads	Not available.
	Capture Beads	Not available.
	Avida Index Primer Pairs 1-96 for ILM	Not available.
	Avida Index Primer Pairs 97-192 for ILM	Not available.

## Section 9. Physical and chemical properties and safety characteristics

<b>Viscosity</b>	:	Nuclease-Free Water	Not available.
		End Prep Buffer	Not available.
		End Prep Enzyme	Not available.
		Ligation Buffer	Not available.
		Ligation Enzyme	Not available.
		Adapter for ILM	Not available.
		Hyb Blocker	Not available.
		Hyb Buffer	Not available.
		Hyb Enhancer	Not available.
		Soft Conversion Reagent A	Not available.
		2X Amplification Mastermix	Not available.
		2X Methyl Amplification Mastermix	Not available.
		Library Wash Buffer	Not available.
		Hyb Wash Buffer 1	Not available.
		Hyb Wash Buffer 2	Not available.
		Resuspension Buffer	Not available.
		Soft Conversion Reagent B	Not available.
		Soft Conversion Binding Beads	Not available.
		5X Soft Conversion Wash Buffer	Not available.
		Soft Conversion Elution Buffer	Not available.
		Soft Conversion Repair Solution	Not available.
		Library Binding Beads	Not available.
		Capture Beads	Not available.
	Avida Index Primer Pairs 1-96 for ILM	Not available.	
	Avida Index Primer Pairs 97-192 for ILM	Not available.	

### Particle characteristics

<b>Median particle size</b>	:	Nuclease-Free Water	Not applicable.
		End Prep Buffer	Not applicable.
		End Prep Enzyme	Not applicable.
		Ligation Buffer	Not applicable.
		Ligation Enzyme	Not applicable.
		Adapter for ILM	Not applicable.
		Hyb Blocker	Not applicable.
		Hyb Buffer	Not applicable.
		Hyb Enhancer	Not applicable.
		Soft Conversion Reagent A	Not applicable.
		2X Amplification Mastermix	Not applicable.
		2X Methyl Amplification Mastermix	Not applicable.
		Library Wash Buffer	Not applicable.
		Hyb Wash Buffer 1	Not applicable.
		Hyb Wash Buffer 2	Not applicable.
		Resuspension Buffer	Not applicable.
		Soft Conversion Reagent B	Not applicable.
		Soft Conversion Binding Beads	Not applicable.
		5X Soft Conversion Wash Buffer	Not applicable.
		Soft Conversion Elution Buffer	Not applicable.
		Soft Conversion Repair Solution	Not applicable.
		Library Binding Beads	Not applicable.
		Capture Beads	Not applicable.
	Avida Index Primer Pairs 1-96 for ILM	Not applicable.	
	Avida Index Primer Pairs 97-192 for ILM	Not applicable.	

## Section 10. Stability and reactivity

<b>10.1 Reactivity</b>	: Nuclease-Free Water	No specific test data related to reactivity available for this product or its ingredients.
	End Prep Buffer	No specific test data related to reactivity available for this product or its ingredients.
	End Prep Enzyme	No specific test data related to reactivity available for this product or its ingredients.
	Ligation Buffer	No specific test data related to reactivity available for this product or its ingredients.
	Ligation Enzyme	No specific test data related to reactivity available for this product or its ingredients.
	Adapter for ILM	No specific test data related to reactivity available for this product or its ingredients.
	Hyb Blocker	No specific test data related to reactivity available for this product or its ingredients.
	Hyb Buffer	No specific test data related to reactivity available for this product or its ingredients.
	Hyb Enhancer	No specific test data related to reactivity available for this product or its ingredients.
	Soft Conversion Reagent A	No specific test data related to reactivity available for this product or its ingredients.
	2X Amplification Mastermix	No specific test data related to reactivity available for this product or its ingredients.
	2X Methyl Amplification Mastermix	No specific test data related to reactivity available for this product or its ingredients.
	Library Wash Buffer	No specific test data related to reactivity available for this product or its ingredients.
	Hyb Wash Buffer 1	No specific test data related to reactivity available for this product or its ingredients.
	Hyb Wash Buffer 2	No specific test data related to reactivity available for this product or its ingredients.
	Resuspension Buffer	No specific test data related to reactivity available for this product or its ingredients.
	Soft Conversion Reagent B	No specific test data related to reactivity available for this product or its ingredients.
	Soft Conversion Binding Beads	No specific test data related to reactivity available for this product or its ingredients.
	5X Soft Conversion Wash Buffer	No specific test data related to reactivity available for this product or its ingredients.
	Soft Conversion Elution Buffer	No specific test data related to reactivity available for this product or its ingredients.
	Soft Conversion Repair Solution	No specific test data related to reactivity available for this product or its ingredients.
	Library Binding Beads	No specific test data related to reactivity available for this product or its ingredients.
	Capture Beads	No specific test data related to reactivity available for this product or its ingredients.
	Avida Index Primer Pairs 1-96 for ILM	No specific test data related to reactivity available for this product or its ingredients.
	Avida Index Primer Pairs 97-192 for ILM	No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: Nuclease-Free Water	The product is stable.
	End Prep Buffer	The product is stable.
	End Prep Enzyme	The product is stable.
	Ligation Buffer	The product is stable.
	Ligation Enzyme	The product is stable.
	Adapter for ILM	The product is stable.
	Hyb Blocker	The product is stable.
	Hyb Buffer	The product is stable.

## Section 10. Stability and reactivity

Hyb Enhancer	The product is stable.
Soft Conversion Reagent A	The product is stable.
2X Amplification Mastermix	The product is stable.
2X Methyl Amplification Mastermix	The product is stable.
Library Wash Buffer	The product is stable.
Hyb Wash Buffer 1	The product is stable.
Hyb Wash Buffer 2	The product is stable.
Resuspension Buffer	The product is stable.
Soft Conversion Reagent B	The product is stable.
Soft Conversion Binding Beads	The product is stable.
5X Soft Conversion Wash Buffer	The product is stable.
Soft Conversion Elution Buffer	The product is stable.
Soft Conversion Repair Solution	The product is stable.
Library Binding Beads	The product is stable.
Capture Beads	The product is stable.
Avida Index Primer Pairs 1-96 for ILM	The product is stable.
Avida Index Primer Pairs 97-192 for ILM	The product is stable.

### 10.3 Possibility of hazardous reactions

: Nuclease-Free Water	Under normal conditions of storage and use, hazardous reactions will not occur.
End Prep Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
End Prep Enzyme	Under normal conditions of storage and use, hazardous reactions will not occur.
Ligation Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
Ligation Enzyme	Under normal conditions of storage and use, hazardous reactions will not occur.
Adapter for ILM	Under normal conditions of storage and use, hazardous reactions will not occur.
Hyb Blocker	Under normal conditions of storage and use, hazardous reactions will not occur.
Hyb Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
Hyb Enhancer	Under normal conditions of storage and use, hazardous reactions will not occur.
Soft Conversion Reagent A	Under normal conditions of storage and use, hazardous reactions will not occur.
2X Amplification Mastermix	Under normal conditions of storage and use, hazardous reactions will not occur.
2X Methyl Amplification Mastermix	Under normal conditions of storage and use, hazardous reactions will not occur.
Library Wash Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
Hyb Wash Buffer 1	Under normal conditions of storage and use, hazardous reactions will not occur.
Hyb Wash Buffer 2	Under normal conditions of storage and use, hazardous reactions will not occur.
Resuspension Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
Soft Conversion Reagent B	Under normal conditions of storage and use, hazardous reactions will not occur.
Soft Conversion Binding Beads	Under normal conditions of storage and use, hazardous reactions will not occur.
5X Soft Conversion Wash Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
Soft Conversion Elution Buffer	Under normal conditions of storage and use,

## Section 10. Stability and reactivity

Soft Conversion Repair Solution	hazardous reactions will not occur.
Library Binding Beads	Under normal conditions of storage and use, hazardous reactions will not occur.
Capture Beads	Under normal conditions of storage and use, hazardous reactions will not occur.
Avida Index Primer Pairs 1-96 for ILM	Under normal conditions of storage and use, hazardous reactions will not occur.
Avida Index Primer Pairs 97-192 for ILM	Under normal conditions of storage and use, hazardous reactions will not occur.

<b>10.4 Conditions to avoid</b>	:	Nuclease-Free Water	No specific data.
		End Prep Buffer	No specific data.
		End Prep Enzyme	No specific data.
		Ligation Buffer	No specific data.
		Ligation Enzyme	No specific data.
		Adapter for ILM	No specific data.
		Hyb Blocker	No specific data.
		Hyb Buffer	No specific data.
		Hyb Enhancer	No specific data.
		Soft Conversion Reagent A	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
		2X Amplification Mastermix	No specific data.
		2X Methyl Amplification Mastermix	No specific data.
		Library Wash Buffer	No specific data.
		Hyb Wash Buffer 1	No specific data.
		Hyb Wash Buffer 2	No specific data.
		Resuspension Buffer	No specific data.
		Soft Conversion Reagent B	No specific data.
		Soft Conversion Binding Beads	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
		5X Soft Conversion Wash Buffer	No specific data.
		Soft Conversion Elution Buffer	No specific data.
		Soft Conversion Repair Solution	No specific data.
		Library Binding Beads	No specific data.
		Capture Beads	No specific data.
		Avida Index Primer Pairs 1-96 for ILM	No specific data.
		Avida Index Primer Pairs 97-192 for ILM	No specific data.

<b>10.5 Incompatible materials</b>	:	Nuclease-Free Water	May react or be incompatible with oxidizing materials.
		End Prep Buffer	May react or be incompatible with oxidizing materials.
		End Prep Enzyme	May react or be incompatible with oxidizing materials.
		Ligation Buffer	May react or be incompatible with oxidizing materials.
		Ligation Enzyme	May react or be incompatible with oxidizing materials.
		Adapter for ILM	May react or be incompatible with oxidizing materials.
		Hyb Blocker	May react or be incompatible with oxidizing materials.

## Section 10. Stability and reactivity

Hyb Buffer	materials. May react or be incompatible with oxidizing materials.
Hyb Enhancer	May react or be incompatible with oxidizing materials.
Soft Conversion Reagent A	Reactive or incompatible with the following materials: oxidizing materials
2X Amplification Mastermix	May react or be incompatible with oxidizing materials.
2X Methyl Amplification Mastermix	May react or be incompatible with oxidizing materials.
Library Wash Buffer	May react or be incompatible with oxidizing materials.
Hyb Wash Buffer 1	May react or be incompatible with oxidizing materials.
Hyb Wash Buffer 2	May react or be incompatible with oxidizing materials.
Resuspension Buffer	May react or be incompatible with oxidizing materials.
Soft Conversion Reagent B	May react or be incompatible with oxidizing materials.
Soft Conversion Binding Beads	Reactive or incompatible with the following materials: oxidizing materials
5X Soft Conversion Wash Buffer	May react or be incompatible with oxidizing materials.
Soft Conversion Elution Buffer	Reactive or incompatible with the following materials: acids
Soft Conversion Repair Solution	May react or be incompatible with oxidizing materials.
Library Binding Beads	May react or be incompatible with oxidizing materials.
Capture Beads	May react or be incompatible with oxidizing materials.
Avida Index Primer Pairs 1-96 for ILM	May react or be incompatible with oxidizing materials.
Avida Index Primer Pairs 97-192 for ILM	May react or be incompatible with oxidizing materials.

### 10.6 Hazardous decomposition products

: Nuclease-Free Water	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
End Prep Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
End Prep Enzyme	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Ligation Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Ligation Enzyme	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Adapter for ILM	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hyb Blocker	Under normal conditions of storage and use,

## Section 10. Stability and reactivity

	hazardous decomposition products should not be produced.
Hyb Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hyb Enhancer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Soft Conversion Reagent A	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
2X Amplification Mastermix	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
2X Methyl Amplification Mastermix	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Library Wash Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hyb Wash Buffer 1	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hyb Wash Buffer 2	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Resuspension Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Soft Conversion Reagent B	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Soft Conversion Binding Beads	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
5X Soft Conversion Wash Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Soft Conversion Elution Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Soft Conversion Repair Solution	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Library Binding Beads	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Capture Beads	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Avida Index Primer Pairs 1-96 for ILM	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Avida Index Primer Pairs 97-192 for ILM	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
<b>End Prep Buffer</b> Magnesium chloride	LD50 Dermal	Rat - Male, Female	>2000 mg/kg	-
	LD50 Oral	Rat	2800 mg/kg	-
<b>End Prep Enzyme</b> Glycerol	LD50 Oral	Rat	12600 mg/kg	-
<b>Ligation Enzyme</b> Glycerol	LD50 Oral	Rat	12600 mg/kg	-
<b>Hyb Buffer</b> tetramethylammonium chloride	LD50 Dermal	Rabbit - Male, Female	200 to 500 mg/kg	-
	LD50 Oral	Rat	50 mg/kg	-
Dextran sulfate sodium	LD50 Oral	Rat	20600 mg/kg	-
Poly(oxy-1,2-ethanediyl), . alpha.-[ (1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-	LD50 Oral	Rat	2800 mg/kg	-
<b>Hyb Enhancer</b> Formamide	LC50 Inhalation Dusts and mists LD50 Dermal LD50 Oral	Rat - Male Rabbit Rat	>21 mg/l 17 g/kg 5570 mg/kg	4 hours - -
<b>2X Amplification Mastermix</b> Glycerol	LD50 Oral	Rat	12600 mg/kg	-
<b>Hyb Wash Buffer 1</b> Sodium dodecyl sulphate	LD50 Oral	Rat	1288 mg/kg	-
<b>Hyb Wash Buffer 2</b> Poly(oxy-1,2-ethanediyl), . alpha.-[ (1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-	LD50 Oral	Rat	2800 mg/kg	-
<b>Soft Conversion Binding Beads</b> Ethanol	LC50 Inhalation Vapor LD50 Oral	Rat Rat	124700 mg/m <sup>3</sup> 7 g/kg	4 hours -
Guanidinium thiocyanate	LC50 Inhalation Dusts and mists LD50 Oral	Rat - Female Rat - Male, Female	3.181 mg/l 593 mg/kg	4 hours -
Poly(oxy-1,2-ethanediyl), . alpha.-[ (1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-	LD50 Oral	Rat	2800 mg/kg	-

#### Irritation/Corrosion



## Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>End Prep Enzyme</b> Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
<b>Ligation Enzyme</b> Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
<b>Hyb Buffer</b> Poly(oxy-1,2-ethanediyl), . alpha.-[ (1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-	Eyes - Severe irritant	Rabbit	-	1 %	-
<b>Soft Conversion Reagent A</b> tetrahydro-2-furylmethanol	Eyes - Moderate irritant	Rabbit	-	24 hours 20 mg	-
<b>2X Amplification Mastermix</b> Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
<b>Hyb Wash Buffer 1</b> Sodium dodecyl sulphate	Eyes - Mild irritant	Rabbit	-	250 ug	-
	Eyes - Moderate irritant	Rabbit	-	10 mg	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Skin - Mild irritant	Guinea pig	-	24 hours 25 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 50 mg	-
	Skin - Moderate irritant	Mouse	-	24 hours 25 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 25 mg	-
<b>Hyb Wash Buffer 2</b> Poly(oxy-1,2-ethanediyl), . alpha.-[ (1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-	Eyes - Severe irritant	Rabbit	-	1 %	-
<b>Soft Conversion Binding Beads</b> Ethanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Moderate irritant	Rabbit	-	0.066666667 minutes 100 mg	-
	Eyes - Moderate irritant	Rabbit	-	100 uL	-
Poly(oxy-1,2-ethanediyl), . alpha.-[	Eyes - Severe irritant	Rabbit	-	1 %	-

## Section 11. Toxicological information

(1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-

### Sensitization

Not available.

### Mutagenicity

**Conclusion/Summary** : Not available.

### Carcinogenicity

**Conclusion/Summary** : Not available.

### Classification

Product/ingredient name	OSHA	IARC	NTP
<b>Soft Conversion Binding Beads</b> Ethanol	-	1	-

### Reproductive toxicity

**Conclusion/Summary** : Not available.

### Teratogenicity

**Conclusion/Summary** : Not available.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
<b>Hyb Buffer</b> tetramethylammonium chloride	Category 1	oral	central nervous system (CNS) Respiratory tract irritation
Dextran sulfate sodium	Category 3	-	
<b>Hyb Wash Buffer 1</b> Sodium dodecyl sulphate	Category 3	-	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
<b>Hyb Enhancer</b> Formamide	Category 2	oral	blood

### Aspiration hazard

Not available.

### Information on the likely routes of exposure

: Nuclease-Free Water  
End Prep Buffer

Not available.

Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

End Prep Enzyme

Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Ligation Buffer  
Ligation Enzyme

Not available.

Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Adapter for ILM

Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Hyb Blocker  
Hyb Buffer

Not available.

Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

## Section 11. Toxicological information

Hyb Enhancer	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Soft Conversion Reagent A	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
2X Amplification Mastermix	Not available.
2X Methyl Amplification Mastermix	Not available.
Library Wash Buffer	Not available.
Hyb Wash Buffer 1	Not available.
Hyb Wash Buffer 2	Not available.
Resuspension Buffer	Not available.
Soft Conversion Reagent B	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Soft Conversion Binding Beads	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
5X Soft Conversion Wash Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Soft Conversion Elution Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Soft Conversion Repair Solution	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Library Binding Beads	Not available.
Capture Beads	Not available.
Avida Index Primer Pairs 1-96 for ILM	Not available.
Avida Index Primer Pairs 97-192 for ILM	Not available.

### Potential acute health effects

#### **Eye contact**

: Nuclease-Free Water	No known significant effects or critical hazards.
End Prep Buffer	No known significant effects or critical hazards.
End Prep Enzyme	Causes eye irritation.
Ligation Buffer	No known significant effects or critical hazards.
Ligation Enzyme	Causes eye irritation.
Adapter for ILM	No known significant effects or critical hazards.
Hyb Blocker	No known significant effects or critical hazards.
Hyb Buffer	No known significant effects or critical hazards.
Hyb Enhancer	No known significant effects or critical hazards.
Soft Conversion Reagent A	Causes serious eye irritation.
2X Amplification Mastermix	No known significant effects or critical hazards.
2X Methyl Amplification Mastermix	No known significant effects or critical hazards.
Library Wash Buffer	No known significant effects or critical hazards.
Hyb Wash Buffer 1	No known significant effects or critical hazards.
Hyb Wash Buffer 2	No known significant effects or critical hazards.
Resuspension Buffer	No known significant effects or critical hazards.
Soft Conversion Reagent B	Causes serious eye irritation.
Soft Conversion Binding Beads	Causes serious eye damage.
5X Soft Conversion Wash Buffer	No known significant effects or critical hazards.
Soft Conversion Elution Buffer	Causes serious eye damage.
Soft Conversion Repair Solution	No known significant effects or critical hazards.
Library Binding Beads	No known significant effects or critical hazards.
Capture Beads	No known significant effects or critical hazards.
Avida Index Primer Pairs 1-96 for ILM	No known significant effects or critical hazards.
Avida Index Primer Pairs 97-192 for ILM	No known significant effects or critical hazards.





## Section 11. Toxicological information

	Soft Conversion Reagent B	Adverse symptoms may include the following: pain or irritation watering redness
	Soft Conversion Binding Beads	Adverse symptoms may include the following: pain watering redness
	5X Soft Conversion Wash Buffer	No specific data.
	Soft Conversion Elution Buffer	Adverse symptoms may include the following: pain watering redness
	Soft Conversion Repair Solution	No specific data.
	Library Binding Beads	No specific data.
	Capture Beads	No specific data.
	Avida Index Primer Pairs 1-96 for ILM	No specific data.
	Avida Index Primer Pairs 97-192 for ILM	No specific data.
<b>Inhalation</b>	: Nuclease-Free Water	No specific data.
	End Prep Buffer	No specific data.
	End Prep Enzyme	No specific data.
	Ligation Buffer	No specific data.
	Ligation Enzyme	No specific data.
	Adapter for ILM	No specific data.
	Hyb Blocker	No specific data.
	Hyb Buffer	No specific data.
	Hyb Enhancer	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
	Soft Conversion Reagent A	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
	2X Amplification Mastermix	No specific data.
	2X Methyl Amplification Mastermix	No specific data.
	Library Wash Buffer	No specific data.
	Hyb Wash Buffer 1	No specific data.
	Hyb Wash Buffer 2	No specific data.
	Resuspension Buffer	No specific data.
	Soft Conversion Reagent B	No specific data.
	Soft Conversion Binding Beads	Adverse symptoms may include the following: respiratory tract irritation coughing
	5X Soft Conversion Wash Buffer	No specific data.
	Soft Conversion Elution Buffer	No specific data.
	Soft Conversion Repair Solution	No specific data.
	Library Binding Beads	No specific data.
	Capture Beads	No specific data.
	Avida Index Primer Pairs 1-96 for ILM	No specific data.
	Avida Index Primer Pairs 97-192 for ILM	No specific data.

## Section 11. Toxicological information

<b>Skin contact</b>	:	Nuclease-Free Water	No specific data.
		End Prep Buffer	No specific data.
		End Prep Enzyme	No specific data.
		Ligation Buffer	No specific data.
		Ligation Enzyme	No specific data.
		Adapter for ILM	No specific data.
		Hyb Blocker	No specific data.
		Hyb Buffer	Adverse symptoms may include the following: irritation redness
		Hyb Enhancer	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
		Soft Conversion Reagent A	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
		2X Amplification Mastermix	No specific data.
		2X Methyl Amplification Mastermix	No specific data.
		Library Wash Buffer	No specific data.
		Hyb Wash Buffer 1	No specific data.
		Hyb Wash Buffer 2	No specific data.
		Resuspension Buffer	No specific data.
		Soft Conversion Reagent B	No specific data.
		Soft Conversion Binding Beads	Adverse symptoms may include the following: pain or irritation redness blistering may occur
		5X Soft Conversion Wash Buffer	No specific data.
		Soft Conversion Elution Buffer	Adverse symptoms may include the following: pain or irritation redness blistering may occur
	Soft Conversion Repair Solution	No specific data.	
	Library Binding Beads	No specific data.	
	Capture Beads	No specific data.	
	Avida Index Primer Pairs 1-96 for ILM	No specific data.	
	Avida Index Primer Pairs 97-192 for ILM	No specific data.	
<b>Ingestion</b>	:	Nuclease-Free Water	No specific data.
		End Prep Buffer	No specific data.
		End Prep Enzyme	No specific data.
		Ligation Buffer	No specific data.
		Ligation Enzyme	No specific data.
		Adapter for ILM	No specific data.
		Hyb Blocker	No specific data.
		Hyb Buffer	No specific data.
		Hyb Enhancer	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
		Soft Conversion Reagent A	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
		2X Amplification Mastermix	No specific data.
		2X Methyl Amplification Mastermix	No specific data.

## Section 11. Toxicological information

Library Wash Buffer	No specific data.
Hyb Wash Buffer 1	No specific data.
Hyb Wash Buffer 2	No specific data.
Resuspension Buffer	No specific data.
Soft Conversion Reagent B	No specific data.
Soft Conversion Binding Beads	Adverse symptoms may include the following: stomach pains
5X Soft Conversion Wash Buffer	No specific data.
Soft Conversion Elution Buffer	Adverse symptoms may include the following: stomach pains
Soft Conversion Repair Solution	No specific data.
Library Binding Beads	No specific data.
Capture Beads	No specific data.
Avida Index Primer Pairs 1-96 for ILM	No specific data.
Avida Index Primer Pairs 97-192 for ILM	No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Potential chronic health effects

<b>General</b>	: Nuclease-Free Water	No known significant effects or critical hazards.
	End Prep Buffer	No known significant effects or critical hazards.
	End Prep Enzyme	No known significant effects or critical hazards.
	Ligation Buffer	No known significant effects or critical hazards.
	Ligation Enzyme	No known significant effects or critical hazards.
	Adapter for ILM	No known significant effects or critical hazards.
	Hyb Blocker	No known significant effects or critical hazards.
	Hyb Buffer	No known significant effects or critical hazards.
	Hyb Enhancer	May cause damage to organs through prolonged or repeated exposure.
	Soft Conversion Reagent A	No known significant effects or critical hazards.
	2X Amplification Mastermix	No known significant effects or critical hazards.
	2X Methyl Amplification Mastermix	No known significant effects or critical hazards.
	Library Wash Buffer	No known significant effects or critical hazards.
	Hyb Wash Buffer 1	No known significant effects or critical hazards.
	Hyb Wash Buffer 2	No known significant effects or critical hazards.
	Resuspension Buffer	No known significant effects or critical hazards.
	Soft Conversion Reagent B	No known significant effects or critical hazards.
	Soft Conversion Binding Beads	No known significant effects or critical hazards.
	5X Soft Conversion Wash Buffer	No known significant effects or critical hazards.
	Soft Conversion Elution Buffer	No known significant effects or critical hazards.
	Soft Conversion Repair Solution	No known significant effects or critical hazards.
	Library Binding Beads	No known significant effects or critical hazards.
	Capture Beads	No known significant effects or critical hazards.
	Avida Index Primer Pairs 1-96 for ILM	No known significant effects or critical hazards.
	Avida Index Primer Pairs 97-192 for ILM	No known significant effects or critical hazards.



## Section 11. Toxicological information

<b>Carcinogenicity</b>	: Nuclease-Free Water	No known significant effects or critical hazards.
	End Prep Buffer	No known significant effects or critical hazards.
	End Prep Enzyme	No known significant effects or critical hazards.
	Ligation Buffer	No known significant effects or critical hazards.
	Ligation Enzyme	No known significant effects or critical hazards.
	Adapter for ILM	No known significant effects or critical hazards.
	Hyb Blocker	No known significant effects or critical hazards.
	Hyb Buffer	No known significant effects or critical hazards.
	Hyb Enhancer	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
	Soft Conversion Reagent A	No known significant effects or critical hazards.
	2X Amplification Mastermix	No known significant effects or critical hazards.
	2X Methyl Amplification Mastermix	No known significant effects or critical hazards.
	Library Wash Buffer	No known significant effects or critical hazards.
	Hyb Wash Buffer 1	No known significant effects or critical hazards.
	Hyb Wash Buffer 2	No known significant effects or critical hazards.
	Resuspension Buffer	No known significant effects or critical hazards.
	Soft Conversion Reagent B	No known significant effects or critical hazards.
	Soft Conversion Binding Beads	No known significant effects or critical hazards.
	5X Soft Conversion Wash Buffer	No known significant effects or critical hazards.
	Soft Conversion Elution Buffer	No known significant effects or critical hazards.
	Soft Conversion Repair Solution	No known significant effects or critical hazards.
	Library Binding Beads	No known significant effects or critical hazards.
Capture Beads	No known significant effects or critical hazards.	
Avida Index Primer Pairs 1-96 for ILM	No known significant effects or critical hazards.	
Avida Index Primer Pairs 97-192 for ILM	No known significant effects or critical hazards.	
<b>Mutagenicity</b>	: Nuclease-Free Water	No known significant effects or critical hazards.
	End Prep Buffer	No known significant effects or critical hazards.
	End Prep Enzyme	No known significant effects or critical hazards.
	Ligation Buffer	No known significant effects or critical hazards.
	Ligation Enzyme	No known significant effects or critical hazards.
	Adapter for ILM	No known significant effects or critical hazards.
	Hyb Blocker	No known significant effects or critical hazards.
	Hyb Buffer	No known significant effects or critical hazards.
	Hyb Enhancer	No known significant effects or critical hazards.
	Soft Conversion Reagent A	No known significant effects or critical hazards.
	2X Amplification Mastermix	No known significant effects or critical hazards.
	2X Methyl Amplification Mastermix	No known significant effects or critical hazards.
	Library Wash Buffer	No known significant effects or critical hazards.
	Hyb Wash Buffer 1	No known significant effects or critical hazards.
	Hyb Wash Buffer 2	No known significant effects or critical hazards.
	Resuspension Buffer	No known significant effects or critical hazards.
	Soft Conversion Reagent B	No known significant effects or critical hazards.
	Soft Conversion Binding Beads	No known significant effects or critical hazards.
	5X Soft Conversion Wash Buffer	No known significant effects or critical hazards.
	Soft Conversion Elution Buffer	No known significant effects or critical hazards.
	Soft Conversion Repair Solution	No known significant effects or critical hazards.
	Library Binding Beads	No known significant effects or critical hazards.
Capture Beads	No known significant effects or critical hazards.	
Avida Index Primer Pairs 1-96 for ILM	No known significant effects or critical hazards.	
Avida Index Primer Pairs 97-192 for ILM	No known significant effects or critical hazards.	



## Section 11. Toxicological information

Library Wash Buffer	37635.4	N/A	N/A	N/A	N/A
<b>Hyb Wash Buffer 1</b>					
Hyb Wash Buffer 1	171428.6	N/A	N/A	N/A	N/A
Sodium dodecyl sulphate	1288	N/A	N/A	N/A	1.5
<b>Hyb Wash Buffer 2</b>					
Poly(oxy-1,2-ethanediyl), .alpha.-[ (1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	500	N/A	N/A	N/A	N/A
<b>Soft Conversion Binding Beads</b>					
Soft Conversion Binding Beads	2299.0	5782.2	N/A	N/A	16.7
Ethanol	7000	N/A	N/A	124.7	N/A
Guanidinium thiocyanate	593	1100	N/A	N/A	3.181
Poly(oxy-1,2-ethanediyl), .alpha.-[ (1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	500	N/A	N/A	N/A	N/A
<b>Library Binding Beads</b>					
Library Binding Beads	17855.8	N/A	N/A	N/A	N/A

**Other information** : End Prep Buffer

Adverse symptoms may include the following: May cause skin sensitization.

Adapter for ILM

Adverse symptoms may include the following: May cause skin sensitization.

Hyb Enhancer

Adverse symptoms may include the following: May cause eye irritation. May cause skin irritation.

## Section 12. Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
<b>End Prep Buffer</b>			
Magnesium chloride	Acute EC50 >100 mg/l Fresh water	Algae - <i>Desmodesmus subspicatus</i>	72 hours
	Acute EC50 180000 µg/l Fresh water	Crustaceans - <i>Eudiaptomus padanus</i> ssp. <i>padanus</i> - Adult	48 hours
	Acute IC50 6.8 mg/l Fresh water	Aquatic plants - <i>Lemna aequinoctialis</i>	96 hours
	Acute LC50 32000 µg/l Fresh water	Daphnia - <i>Daphnia hyalina</i> - Adult	48 hours
	Acute LC50 2120 mg/l Fresh water	Fish - <i>Pimephales promelas</i>	96 hours
	Acute NOEC 100 mg/l Fresh water	Algae - <i>Desmodesmus subspicatus</i>	72 hours
	Chronic NOEC 0.1 mg/l Fresh water	Fish - <i>Cyprinus carpio</i>	35 days
<b>End Prep Enzyme</b>			
Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - <i>Oncorhynchus mykiss</i>	96 hours
<b>Ligation Enzyme</b>			
Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - <i>Oncorhynchus mykiss</i>	96 hours
<b>Hyb Buffer</b>			
tetramethylammonium chloride	Acute LC50 462 mg/l Fresh water	Fish - <i>Pimephales promelas</i>	96 hours
Poly(oxy-1,2-ethanediyl), .alpha.-[ (1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	Acute EC50 210 µg/l Fresh water	Algae - <i>Selenastrum</i> sp.	96 hours

## Section 12. Ecological information

	Acute LC50 10800 µg/l Marine water	Crustaceans - <i>Pandalus montagui</i> - Adult	48 hours
	Acute LC50 2.518 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 7200 µg/l Fresh water	Fish - <i>Oncorhynchus mykiss</i>	96 hours
<b>Hyb Enhancer</b> Formamide	Acute EC50 >500 mg/l Fresh water	Algae	72 hours
	Acute EC50 >500 mg/l Fresh water	Daphnia	48 hours
	Acute LC50 6569 mg/l Fresh water	Fish	96 hours
	Acute NOEC 4640 mg/l Fresh water	Algae	72 hours
	Acute NOEC 4640 mg/l Fresh water	Fish	96 hours
<b>Soft Conversion Reagent A</b> tetrahydro-2-furylmethanol	Acute EC50 >98.9 mg/l	Algae	72 hours
	Acute EC50 >91.7 mg/l	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 >101 mg/l	Fish	96 hours
<b>2X Amplification Mastermix</b> Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - <i>Oncorhynchus mykiss</i>	96 hours
<b>Hyb Wash Buffer 1</b> Sodium dodecyl sulphate	Acute EC50 1200 µg/l Marine water	Algae - <i>Skeletonema costatum</i>	96 hours
	Acute LC50 900 µg/l Marine water	Crustaceans - <i>Artemia salina</i> - Adult	48 hours
	Acute LC50 1400 µg/l Fresh water	Daphnia - <i>Daphnia pulex</i> - Neonate	48 hours
	Acute LC50 590 µg/l Fresh water	Fish - <i>Cirrhinus mrigala</i> - Larvae	96 hours
	Chronic NOEC 1.25 mg/l Marine water	Algae - <i>Ulva fasciata</i> - Zoea	96 hours
	Chronic NOEC 1 mg/l Fresh water	Crustaceans - <i>Pseudosida ramosa</i> - Neonate	21 days
	Chronic NOEC 3.2 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	21 days
Chronic NOEC 0.8 mg/l Fresh water	Fish - <i>Gambusia holbrooki</i>	28 days	
<b>Hyb Wash Buffer 2</b> Poly(oxy-1,2-ethanediyl), . alpha.-[ (1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-	Acute EC50 210 µg/l Fresh water	Algae - <i>Selenastrum sp.</i>	96 hours
	Acute LC50 10800 µg/l Marine water	Crustaceans - <i>Pandalus montagui</i> - Adult	48 hours
	Acute LC50 2.518 mg/l Fresh water Acute LC50 7200 µg/l Fresh water	Daphnia - <i>Daphnia magna</i> Fish - <i>Oncorhynchus mykiss</i>	48 hours 96 hours
<b>Soft Conversion Binding Beads</b> Ethanol	Acute EC50 3306 mg/l Marine water	Algae - <i>Ulva pertusa</i>	96 hours
	Acute EC50 1074 mg/l Fresh water	Crustaceans - <i>Cypris subglobosa</i>	48 hours
	Acute EC50 2 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 11000000 µg/l Marine water	Fish - <i>Alburnus alburnus</i>	96 hours
	Chronic NOEC 4.995 mg/l Marine water Chronic NOEC 100 ul/L Fresh water	Algae - <i>Ulva pertusa</i> Daphnia - <i>Daphnia magna</i> - Neonate	96 hours 21 days
Poly(oxy-1,2-ethanediyl), . alpha.-[ (1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-	Acute EC50 210 µg/l Fresh water	Algae - <i>Selenastrum sp.</i>	96 hours
	Acute LC50 10800 µg/l Marine water	Crustaceans - <i>Pandalus montagui</i> - Adult	48 hours
	Acute LC50 2.518 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours

## Section 12. Ecological information

Acute LC50 7200 µg/l Fresh water

Fish - *Oncorhynchus mykiss*

96 hours

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
<b>End Prep Enzyme</b> Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
<b>Ligation Enzyme</b> Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
<b>Hyb Enhancer</b> Formamide	OECD 301A Ready Biodegradability - DOC Die-Away Test	99 % - Readily - 28 days	-	-
<b>Soft Conversion Reagent A</b> tetrahydro-2-furylmethanol	-	92 % - Readily - 28 days	-	-
<b>2X Amplification Mastermix</b> Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
<b>Hyb Wash Buffer 1</b> Sodium dodecyl sulphate	OECD 301B Ready Biodegradability - CO <sub>2</sub> Evolution Test	95 % - Readily - 28 days	20 mg/l	-
<b>Soft Conversion Binding Beads</b> Guanidinium thiocyanate	OECD 302B Inherent Biodegradability: Zahn-Wellens/EMPA Test	46 % - Inherent - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>Nuclease-Free Water</b> water	-	-	Readily
<b>Hyb Buffer</b> tetramethylammonium chloride	-	-	Readily
<b>Hyb Enhancer</b> Formamide	-	-	Readily

## Section 12. Ecological information

<b>Soft Conversion Reagent A</b> tetrahydro-2-furymethanol	-	-	Readily
<b>Hyb Wash Buffer 1</b> Sodium dodecyl sulphate	-	-	Readily
<b>Soft Conversion Binding Beads</b> Ethanol	-	-	Readily
Guanidinium thiocyanate	-	-	Inherent

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>Nuclease-Free Water</b> water	-1.38	-	Low
<b>End Prep Enzyme</b> Glycerol	-1.76	-	Low
<b>Ligation Enzyme</b> Glycerol	-1.76	-	Low
<b>Hyb Buffer</b> tetramethylammonium chloride	<-1.6	-	Low
Poly(oxy-1,2-ethanediyl), . alpha.-[ (1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-	2.7	78.67	Low
<b>Hyb Enhancer</b> Formamide	-0.82	-	Low
<b>Soft Conversion Reagent A</b> tetrahydro-2-furymethanol	0.722	-	Low
<b>2X Amplification Mastermix</b> Glycerol	-1.76	-	Low
<b>Hyb Wash Buffer 1</b> Sodium dodecyl sulphate	-2.03	-	Low
<b>Hyb Wash Buffer 2</b> Poly(oxy-1,2-ethanediyl), . alpha.-[ (1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-	2.7	78.67	Low
<b>Soft Conversion Binding Beads</b> Ethanol	-0.35	0.5	Low
Guanidinium thiocyanate	<-1.7	-	Low
Poly(oxy-1,2-ethanediyl), . alpha.-[ (1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-	2.7	78.67	Low

## Section 12. Ecological information

### 12.4 Mobility in soil

Soil/water partition coefficient ( $K_{oc}$ ) : Not available.

12.5 Other adverse effects : No known significant effects or critical hazards.

## Section 13. Disposal considerations

### 13.1 Waste treatment methods






**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IMDG	IATA
UN number	UN3316	UN3316	UN3316	UN3316	UN3316
UN proper shipping name	Chemical kit	CHEMICAL KIT	EQUIPO QUIMICO	CHEMICAL KIT	Chemical kit
Transport hazard class(es)	9 	9 	9 	9 	9 
Packing group	II	II	II	II	II
Environmental hazards	No.	No.	No.	No.	No.

### Additional information

Remarks: Excepted Quantity

**DOT Classification** : **Limited quantity** Yes.  
**Packaging instruction** Exceptions: 161. Non-bulk: 161. Bulk: None.  
**Quantity limitation** Passenger aircraft/rail: 10 kg. Cargo aircraft: 10 kg.  
**Special provisions** 15

## Section 14. Transport information

- TDG Classification** : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9).  
**Passenger Carrying Road or Rail Index** 10  
**Special provisions** 65, 141
- Mexico Classification** : **Special provisions** 251, 340
- IMDG** : **Emergency schedules** F-A, \_S-P\_  
**Special provisions** 251, 340
- IATA** : **Quantity limitation** Passenger and Cargo Aircraft: 10 kg. Packaging instructions: 960. Cargo Aircraft Only: 10 kg. Packaging instructions: 960. Limited Quantities - Passenger Aircraft: 1 kg. Packaging instructions: Y960.  
**Special provisions** A44, A163
- Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
- Transport in bulk according to IMO instruments** : Not available.

## Section 15. Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- U.S. Federal regulations** : **TSCA 5(a)2 proposed significant new use rules:** Nonylphenol, ethoxylated  
**TSCA 8(a) PAIR:** Formamide; Poly(oxy-1,2-ethanediyl), .alpha.-[ (1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-; Nonylphenol, ethoxylated; Polyoxyethylene octyl phenyl ether  
**TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**Clean Water Act (CWA) 311:** ammonium hydrogensulphite; Sodium hydroxide; Edetic acid
- Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed
- Clean Air Act Section 602 Class I Substances** : Not listed
- Clean Air Act Section 602 Class II Substances** : Not listed
- DEA List I Chemicals (Precursor Chemicals)** : Not listed
- DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
<b>Soft Conversion Binding Beads</b> Sodium azide	<0.1	Yes.	500	-	1000	-
<b>Capture Beads</b> Sodium azide	<0.1	Yes.	500	-	1000	-

**SARA 304 RQ** : 94696969.7 lbs / 42992424.2 kg



## Section 15. Regulatory information

### SARA 311/312

#### Classification

Nuclease-Free Water	Not applicable.
End Prep Buffer	Not applicable.
End Prep Enzyme	EYE IRRITATION - Category 2B
Ligation Buffer	Not applicable.
Ligation Enzyme	EYE IRRITATION - Category 2B
Adapter for ILM	Not applicable.
Hyb Blocker	Not applicable.
Hyb Buffer	ACUTE TOXICITY (oral) - Category 4 SKIN IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1
Hyb Enhancer	CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
Soft Conversion Reagent A	FLAMMABLE LIQUIDS - Category 4 EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION - Category 1B
2X Amplification Mastermix	Not applicable.
2X Methyl Amplification Mastermix	Not applicable.
Library Wash Buffer	Not applicable.
Hyb Wash Buffer 1	Not applicable.
Hyb Wash Buffer 2	Not applicable.
Resuspension Buffer	Not applicable.
Soft Conversion Reagent B	EYE IRRITATION - Category 2A FLAMMABLE LIQUIDS - Category 3
Soft Conversion Binding Beads	SKIN CORROSION - Category 1C SERIOUS EYE DAMAGE - Category 1 HNOC - Corrosive to respiratory tract
5X Soft Conversion Wash Buffer	Not applicable.
Soft Conversion Elution Buffer	SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1
Soft Conversion Repair Solution	Not applicable.
Library Binding Beads	Not applicable.
Capture Beads	Not applicable.
Avida Index Primer Pairs 1-96 for ILM	Not applicable.
Avida Index Primer Pairs 97-192 for ILM	Not applicable.

### Composition/information on ingredients

Name	%	Classification
<b>End Prep Enzyme</b>		
Glycerol	≥50 - ≤75	EYE IRRITATION - Category 2B
<b>Ligation Enzyme</b>		
Glycerol	≥50 - ≤75	EYE IRRITATION - Category 2B
<b>Hyb Buffer</b>		
tetramethylammonium chloride	≥10 - <15	ACUTE TOXICITY (oral) - Category 2 ACUTE TOXICITY (dermal) - Category 3 SKIN IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1
Dextran sulfate sodium	≤3	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
<b>Hyb Enhancer</b>		
Formamide	≥90	CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
<b>Soft Conversion Reagent A</b>		
tetrahydro-2-furylmethanol	≥90	FLAMMABLE LIQUIDS - Category 4 EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION - Category 1B
<b>2X Amplification Mastermix</b>		
Glycerol	<10	EYE IRRITATION - Category 2B

## Section 15. Regulatory information

<b>Soft Conversion Reagent B</b> ammonium hydrogensulphite	≥50 - ≤75	EYE IRRITATION - Category 2A
<b>Soft Conversion Binding Beads</b> Ethanol	≥50 - ≤75	FLAMMABLE LIQUIDS - Category 2 EYE IRRITATION - Category 2A HNOC - Defatting irritant
Guanidinium thiocyanate	≥10 - ≤21	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION - Category 1C SERIOUS EYE DAMAGE - Category 1 HNOC - Corrosive to digestive tract HNOC - Corrosive to respiratory tract
Poly(oxy-1,2-ethanediyl), .alpha.- [(1,1,3,3-tetramethylbutyl)phenyl] -.omega.-hydroxy-	≤6.5	ACUTE TOXICITY (oral) - Category 4 SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1

### SARA 313

	Product name	CAS number	%
<b>Form R - Reporting requirements</b>	<b>Soft Conversion Reagent B</b> ammonium hydrogensulphite	10192-30-0	≥50 - ≤75
<b>Supplier notification</b>	<b>Hyb Enhancer</b> Formamide	75-12-7	≥90
	<b>Soft Conversion Reagent B</b> ammonium hydrogensulphite	10192-30-0	≥50 - ≤75

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

#### Massachusetts

: The following components are listed: GLYCERINE MIST; TETRAHYDROFURFURYL ALCOHOL; FORMAMIDE; AMMONIUM BISULFITE; ETHYL ALCOHOL

#### New York

: The following components are listed: Ammonium bisulfite

#### New Jersey

: The following components are listed: GLYCERIN; FORMAMIDE; AMMONIUM BISULFITE; ETHYL ALCOHOL

#### Pennsylvania

: The following components are listed: 1,2,3-PROPANETRIOL; 2-FURANMETHANOL, TETRAHYDRO-; FORMAMIDE; SULFUROUS ACID, MONOAMMONIUM SALT; ETHANOL

### California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

## Section 15. Regulatory information

Not listed.

### Inventory list

<b>Australia</b>	: Not determined.
<b>Canada</b>	: Not determined.
<b>China</b>	: Not determined.
<b>Japan</b>	: <b>Japan inventory (CSCL)</b> : Not determined. <b>Japan inventory (ISHL)</b> : Not determined.
<b>New Zealand</b>	: Not determined.
<b>Philippines</b>	: Not determined.
<b>Republic of Korea</b>	: Not determined.
<b>Taiwan</b>	: Not determined.
<b>Thailand</b>	: Not determined.
<b>Turkey</b>	: Not determined.
<b>United States</b>	: Not determined.
<b>Viet Nam</b>	: Not determined.

## Section 16. Other information

### Procedure used to derive the classification

Classification	Justification
<b>End Prep Buffer</b> AQUATIC HAZARD (LONG-TERM) - Category 3	Calculation method
<b>End Prep Enzyme</b> EYE IRRITATION - Category 2B	Calculation method
<b>Ligation Enzyme</b> EYE IRRITATION - Category 2B	Calculation method
<b>Hyb Buffer</b> ACUTE TOXICITY (oral) - Category 4 SKIN IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3	Calculation method Calculation method Calculation method Calculation method
<b>Hyb Enhancer</b> CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method Calculation method Calculation method
<b>Soft Conversion Reagent A</b> FLAMMABLE LIQUIDS - Category 4 EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION - Category 1B	On basis of test data Calculation method Calculation method
<b>Soft Conversion Reagent B</b> EYE IRRITATION - Category 2A	Calculation method
<b>Soft Conversion Binding Beads</b> FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION - Category 1C SERIOUS EYE DAMAGE - Category 1 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2	On basis of test data Calculation method Calculation method Calculation method Calculation method

## Section 16. Other information

<b>Soft Conversion Elution Buffer</b> SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1	On basis of test data On basis of test data
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### History

<b>Date of issue/Date of revision</b>	: 04/08/2024
<b>Date of previous issue</b>	: 02/26/2024
<b>Version</b>	: 1.1
<b>Key to abbreviations</b>	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available UN = United Nations

✔ Indicates information that has changed from previously issued version.

### Notice to reader

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